NWSNet SYSTEM MODIFICATION NOTE 1
Maintenance, Logistics, and Acquisition Division
W/OPS12: KS

SUBJECT: Installation of SonicWall TZ170 Network Appliance between
                        NWSNet and BDDS Network.

PURPOSE: This document provides hardware and software installation
                        instructions for the SonicWall TZ170 Network Appliance
                        which will be installed in the AWIPS Rack at **CP Rack #2
                        Shelf #2**.

                        The SonicWall TZ170 Network Appliance will be used to
                        provide bidirectional Network Address Translation (NAT) to
                        and from the Regional National Weather Service Network
                        (NWSNet) and Base Data Distribution System (BDDS)
                        Network. In addition to NAT, the SonicWall TZ170 Network
                        Appliance has the ability to protect the NWS Network from
                        untrusted connections from the BDDS Network if desired.

EFFECTIVITY: See Attachment **B** for list of affected sites.

ESTIMATED   Once the Open Radar Product Generator (ORPG) Build 5
COMPLETION DATE: implementation schedule has been completed, the installation
                        of the SonicWall TZ170 must be completed 45 days after
                        receipt of this document and the TZ170 appliance.

                        Contact the Regional Headquarters and Jami Casamento
                        (301-713-1570 x117, jami.casamento@noaa.gov) to
                        schedule the install date.

EQUIPMENT   Regional NWSNet and BDDS Network.
AFFECTED:

SPARES AFFECTED: N/A

ACCOMPLISHED BY: Electronics System Analysts (ESA)

PARTS   The following hardware is required to accomplish this
REQUIRED: modification:
                        SonicWall TZ170 and AC adapter.
                        (NSN: 7010-01-519-2258; ASN: M200-1)

SOURCE OF   Parts will be requisitioned by NWS Headquarters and
MATERIALS: shipped at no cost to the site.

TOOLS, CABLES, AND   • A laptop computer with an Ethernet port and cable to
TEST EQUIPMENT   connect and configure the SonicWall TZ170
REQUIRED: • Internet Explorer 6.x or another browser that supports
                          128 bit encryption installed on the laptop

- RJ-45 cable crimper (if needed to make network cables)
- Two (2) straight-thru CAT5 network cables and RJ45 connectors to connect the SonicWall TZ170 to the:
    - ORPG/BDDS LAN.
    - NWS Network.

ESTIMATED TIME
REQUIRED:

No more than 2 hours.

EFFECT ON OTHER
INSTRUCTIONS:

None.

AUTHORIZATION:

The authority for this modification is by NWS Headquarters direction.

VERIFICATION
STATEMENT:

This modification was successfully installed, tested, and verified at Yuma, AZ (KYUX) and Dodge City, KS (DDC).

DISPOSITION OF
REMOVED
PARTS/MATERIALS:

Any sites that were shipped a temporary Local Data Manager (LDM) Server from National Severe Storms Laboratory (NSSL), Lincoln Laboratory (LL), Forecast Systems Laboratory (FSL), National Aeronautics & Space Administration (NASA), University of Washington (UW), or the University of Alabama in Huntsville (UAH) needs to disconnect it at this time. The site should keep the LDM Server for 2 months after the Sonic Wall TZ170 is installed. The server should then be shipped back after the data has been received and verified by regional headquarters:

NSSL or CRAFT: Send hardware to:
     Mark Benner
     NSSL
     1313 Halley Circle
     Norman, OK 73069

     Phone: 405-366-0520

LL: Send hardware to:
     MIT Lincoln Laboratory
     Attention Dave Broussard (S1-672)
     Building E Receiving
     244 Wood Street
     Lexington, MA 02421

     Phone: 781-981-3526

FSL: Send hardware to:
Woody Roberts
FSL
RM: 3C101
325 BROADWAY
BOULDER CO 80305-3328

Phone: (303)497-6104

NASA: Send hardware to:
David B. Wolff
NASA/TRMM, Code 910.1
Building 22, Room 380a
Greenbelt, MD 20771

Phone: 301-286-3767

UW: Send hardware to:
Prof. Harry Edmon
Dept. of Atmospheric Sciences
University of Washington
Box 351640
Seattle, WA 98195-1640

Phone: 206-543-0547

UAH: Send hardware to:
Sandra H. Redman
University of Alabama in Huntsville
Information Technology Research Center
National Space Science and Technology Center
320 Sparkman Dr.
Huntsville, AL 35805-1912

Phone: (256) 961-7806

NOTE: A list of sites that received LDM Servers is located in the back of this document (see Attachment D). Notify the corresponding party when the LDM Server is shipped.

PROCEDURE: Attachment **A** provides procedures for implementing this modification.

REPORTING INSTRUCTIONS:

Report the completed modification using the Engineering Management Reporting System (EMRS) according to the instructions in NWS Instruction 30-2104, Maintenance Documentation, Part 4. Include the following information on the EMRS Report:

Block #	Block Type	Information
5	Description	Install the SonicWall TZ170 Network Appliance
7	Equipment Code	WAN
8	Serial Number	001
15	Comments	Installed the SonicWall TZ170 Network Appliance I.A.W. NWSNet Modification Note 1; Serial Number of SonicWall TZ170: _____
17a	Mod. No.	1

A sample EMRS report is provided as attachment G.

Mark S. Paese
Director, Maintenance, Logistics, and Acquisition Division

Attachment A – SonicWall TZ170 Installation Procedures
Attachment B – Effectivity List
Attachment C - Site-specific IP Addresses
Attachment D – Sites Holding LDM Servers
Attachment E – SonicWall TZ170 Shipping Schedule
Attachment F – External Connections
Attachment G - Sample EMRS Report

Attachment A – SonicWall TZ170 Installation Procedures

Project Background and Overview

NEXRAD Level II data recorders are approaching end of life, and there is a new National Centers for Environmental Prediction (NCEP) requirement for "near real time" data delivery. A network approach for the delivery of Level II data to NCEP and National Climatic Data Center (NCDC) via NWSNet and Internet2 has been designed and approved. The network design approach will use funds originally budgeted for replacement of the Level II recorders. The network design approach requires purchasing a number of hardware and software items by NWS Headquarters.

NWS collects NEXRAD Level II data using tape drives at each NEXRAD site. The sites ship tapes to the NCDC. The data is available upon request from NCDC. The current baseline tape drives are at end-of-life and require replacement. The baseline has been plagued with random tape drive failures and requires a technician to collect tapes from radar shelters, sometimes in remote areas. NWS has an operational requirement to send NEXRAD Level II data to NCDC. There is a new operational requirement for near real-time Level II data to initialize weather models at the NCEP. This project was briefed in April 2002 to the NWS Operations Committee of the Corporate Board. The resulting decision was approval to use budgeted FY02 and FY03 funds for the deployment of replacement Level II recorders towards the future network solution. The concept of network transmission of Level II data was proved in a collaborative effort (Collaborative Radar Acquisition Field Test project) involving 59 NEXRAD sites, various NOAA offices, the Federal Aviation Administration (FAA), universities, and industry.

The Office of Science and Technology (OST) and Systems Engineering Center (SEC) has been tasked to design the NWSNet/Internet2 NEXRAD Level II Archive Data Network. The Chief Information Officer (CIO) has been tasked to provide support for security and telecommunication circuit procurement. The four CONUS regional headquarters have been tasked to provide site level and regional network support. The Technical Operation Center (TOC) has been tasked to provide support and maintenance on the MAX top tier LDM servers.

Information concerning the implementation of the NWS project to electronically collect and distribute Level II data can be found at:
                                    http://www.osf.noaa.gov/NWS_Level_2/

System Overview

Requirement: Installation of SonicWall TZ170 at the WFO sites.

The SonicWall TZ170 Network Appliance will be used to provide bidirectional Network Address Translation (NAT) to and from the Regional NWSNet and BDDS Network. In addition to NAT, the SonicWall TZ170 Network Appliance has the ability to protect the NWS Network from untrusted connections from the BDDS Network if desired.

The SonicWall TZ170 will be installed in the AWIPS Rack at: **CP Rack #2 Shelf #2**

The following documentation focuses on the operation and configuration of the SonicWall TZ170 installation for each of the Weather Forecast Office (WFO) sites that have NEXRAD Level II data routing to regional headquarters.

Hardware

Vendor / Model:	SonicWall TZ170 Enhanced
Firmware Version:	SonicOS Enhanced 2.1.0.2
ROM Version:	SonicROM 2.0.0.3
CPU:	SonicWALL Security Processor
Total Memory:	64MB RAM, 8MB Flash
Warranty and Service Contract:	The SonicWall TZ170 has one year warranty.
Vendor Documentation:	www.sonicwall.com
IP Addresses:	See Attachment C
Rack Location:	CP Rack #2 Shelf #2

Figure 1: SonicWall TZ170 Front View
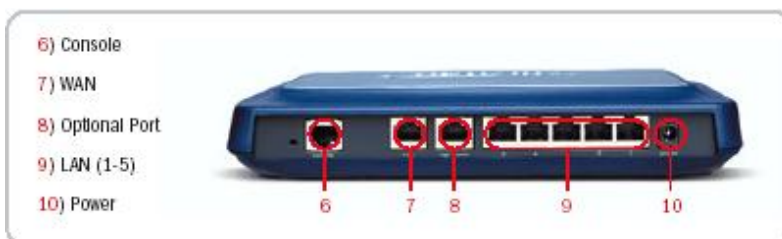

Figure 2: SonicWall TZ170 Rear View

Network

The Network Architecture Diagram (Figure 3) is a logical overview to show where the SonicWall TZ170 Network Appliance will be installed at each of the WFO sites. Radar data will be routed from the WSR-88D Radars to the ORPG LAN. The LDM Server during Build 5 will be installed in the BDDS Server. The BDDS / LDM Server will accept requests from the Regional LDM Servers.

Figure 3: NWSNet Architecture

IP Address Table

FW Interfaces:	IP Address	Subnet Mask
LAN 1	NWS Network (Defined by Region)	
WAN	192.168.x.26 (Defined by ROC)	
OPT / DMZ	10.10.10.100	255.255.255.0

Installation

With ORPG Build 5 release to field sites scheduled to begin 3/31/04, the functionality of the SonicWall TZ170 in these instructions will be added to the BDDS for the full operational capability.

> **Repair and Sparing:** NRC provides sparing for all of the SonicWall TZ170 Network Appliances.

NOTE:	Any costs associated with the purchase or manufacturing of cables, tools, and/or supplies should be reported to the sites' corresponding regional headquarters.

Region:	Point of Contact:	E-mail:	Phone #
Central	Bill Gery	William.Gery@noaa.gov	(816) 891-7734 x414
Western	Graham Stork	Graham.Stork@noaa.gov	(801) 524-5120 x286
	Jeff Walker	Jeff.Walker@noaa.gov	(801) 524-5120 x278
Eastern	Fred Pierce	Frederick.Pierce@noaa.gov	(631) 244-0152
	Fortune Vilcko	Fortune.Vilcko@noaa.gov	(631) 244-0157
Southern	Bruce Marshak	Bruce.Marshak@noaa.gov	(817) 978-1100 x146
	Martin Garcia	Martin.Garcia@noaa.gov	(817) 978-7777 x137
	Eric Howieson	Eric.Howieson@noaa.gov	(817) 978-7777 x137

> **Help Desk Assistance:** There will be no WSR-88D Hotline support for this equipment during the initial install. However, OST will provide Monday - Friday (non-federal holiday), 9 am to 5 pm (EST), phone assistance to sites requiring assistance installing and maintaining the hardware and making the communications connections. Contact the regional headquarters and Jami Casamento to schedule the install date. The OST point of contact for this field support is:

<div align="center">

Jami Casamento
Phone: 301-713-1570 x117
E-Mail: jami.casamento@noaa.gov

</div>

> This approach will result in a net time savings for WFOs due to the ability to halt Level II tape recording and maintenance once this equipment is installed and data are successfully flowing through the network to the NCDC. The NWS focal point for operational WSR-88D issues is Tim Crum (W/OPS4).

External Connections: All untrusted connections to the BDDS LAN will be terminated prior to the installation of the SonicWall TZ170 (See Attachment F -External Connections). The point of contact for the external connection on the BDDS LAN is:

Tim Crum
Phone: 405-573-8888
E-Mail: Tim.D.Crum@noaa.gov

Inventory and Inspection of Equipment

Contact the NRC at 816-926-3217 if any equipment is missing or damaged.

NOTE:	Contact the regional headquarters and advise them of any problems encountered.

Location of SonicWall TZ170 Network Appliance

The SonicWall TZ170 is placed in **CP Rack 2, Shelf 2**

PROCEDURE

NOTE:	Confirm that previous LDM servers from NSSL, Lincoln Labs, FSL, NASA, UW, or UAH are disconnected at this time.

Hardware Installation

1. Plug one end of the Ethernet CAT5 network cable into the port labeled **1** (the LAN port) on the back of the SonicWall TZ170 (Figure 4) and the other end of the Ethernet CAT5 network cable into the NWSNet switch.

Figure 4: LAN Port

CRH: The connection for the Central Region WFO LDM servers to NWSNet will be plugged into the LDAD WaveSwitch on port 10.

NOTE:	The WaveSwitch is directly connected to the WFO NWSNet Cisco 2651 router. If port 10 on the WaveSwitch is taken, use port 9.

WRH: The connection for the Western Region WFO LDM servers to NWSNet will be plugged into the HP ProCurve 4000M Switch.

ERH: The connection for the Eastern Region WFO LDM servers to NWSNet will be plugged into the HP ProCurve 4000M Switch.

NOTE:	For ERH and WRH, the ProCurve 4000M switch is directly connected to the WFO NWSNet Cisco 2621 router.

SRH: The connection for the Southern Region WFO LDM servers to NWSNet will be plugged into the Linksys 8 port switch.

NOTE:	The Linksys Switch is directly connected to the WFO NWSNet Cisco router port FE1.

2. Plug one end of the CAT5 network cable into the port labeled **WAN** on the back of the SonicWall TZ170 (Figure 5). Plug the other end of the CAT5 network cable into UD70 **CP3** (I/O panel on the back of the ORPG cabinet) BDDS LAN.

NOTE:	The DOD sites connect the SonicWall TZ170 WAN interface directly into the DOD Frame Relay Router (Cisco 2621) Ethernet interface.

Figure 5: WAN Port

3.   Power-on the system. Plug the power adaptor into the back of the SonicWall
        workstation (Figure 6), then into an outlet supplied by the building UPS or equivalent.

Figure 6: Power Adapter Port

SYSTEM CONFIGURATION

The SonicWall TZ170 is configured with the default IP address of 192.168.168.168. This IP address is used to initially access the Management interface of the SonicWall TZ170. To access the Management interface for the first time, configure the laptop computer with an IP address in the same network range as the SonicWall.

The following setup configurations provide NAT functionality between the BDDS LAN and the Regional NWSNet.

NOTE:	The figures in this document are to be used as examples. Refer to Attachment C and enter the correct IP address information for the corresponding site.

Software:

1. Configure the Laptop Ethernet Interface with the following (Figure 7):

     IP Address: **192.168.168.200**
     Subnet Mask: **255.255.255.0**
     Default Gateway: **192.168.168.168**

Figure 7: TCP/IP Properties
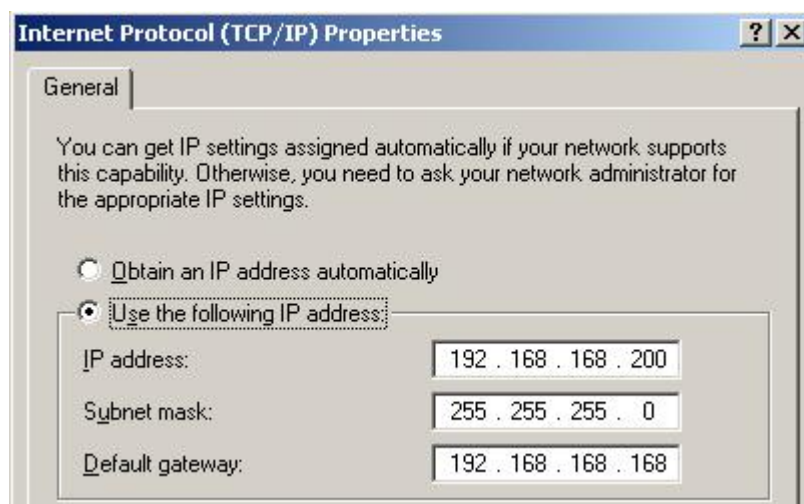
2. Using a straight through RJ45 Ethernet cable, connect from the laptop Ethernet Interface to a **LAN** interface of the SonicWall TZ170 (Port 2).

3. Launch Internet Explorer version 6.x (or another browser that supports 128 bit encryption).

4. Type in IP address **192.168.168.168** in the browser address location. This displays the SonicWall TZ170 Login screen (Figure 8).
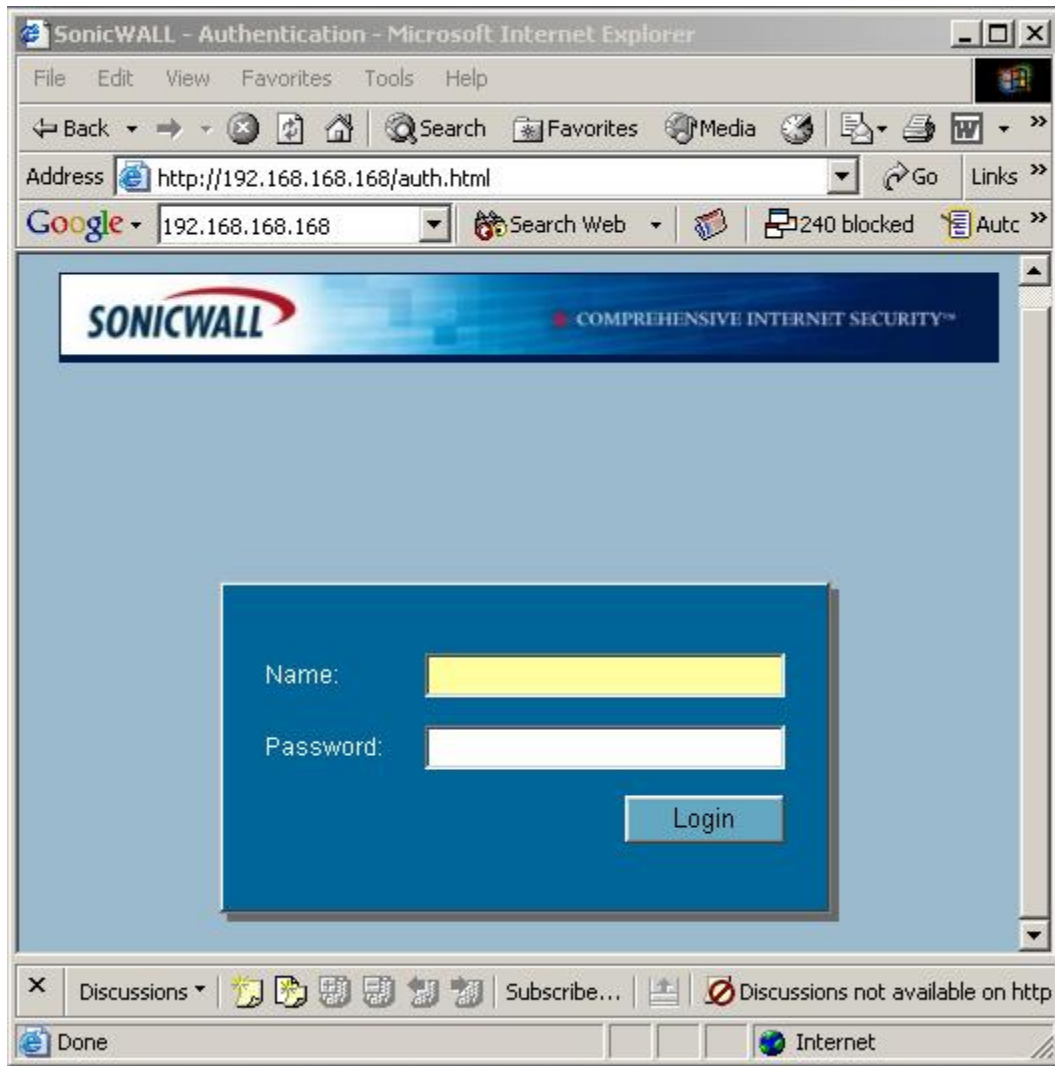
Figure 8: SonicWall Login Screen

5. Login using the default ID and Password.

    Name ID: **admin**
    Password: *password*

NOTE: The password is case sensitive. Make sure the caps lock key is off.

Configuring the OPT Interface:

The Optional Interface is used to configure and perform maintenance on the SonicWall TZ170.

1. Click on **Network** located on the left margin.

2. Click on the **Interfaces** folder located on the left margin (Figure 9), if not already opened.

Figure 9: Interfaces Menu

3. Click on the *Configure* icon ( ) in the OPT Interface row (towards the right margin) to edit the interface.

4. Edit the OPT Interface with the following information (Figure 10):

Zone: **DMZ**

IP Address: **10.10.10.100**

Subnet Mask: **255.255.255.0**

Comment: **Management Interface**

Management: Check **HTTP**, **HTTPS** and **PING**

Figure 10: Edit OPT Settings

5. Click on **OK** at the bottom to save the changes.

6. Click on **Logout** in the lower left corner to exit the SonicWall TZ170 settings screen, and close the browser.

7. Change the Laptop Ethernet Interface with the following configuration (Figure 11):

    IP Address: **10.10.10.200**
    Subnet Mask: **255.255.255.0**
    Default Route: **10.10.10.100**
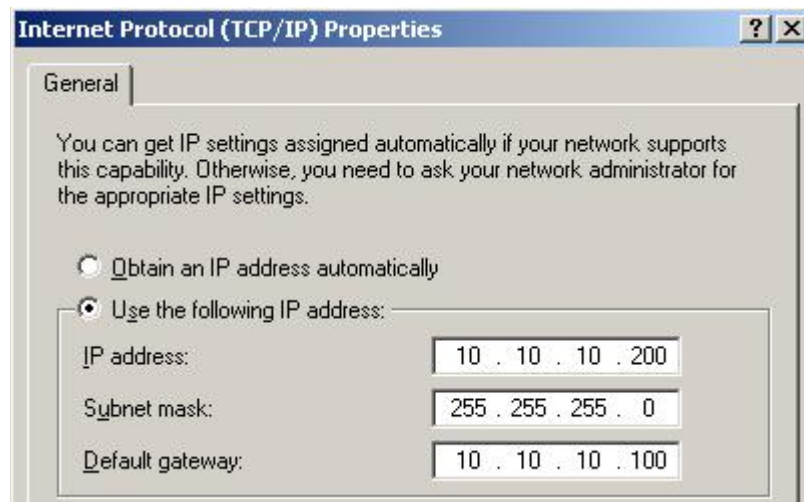
Figure 11

8. Unplug the Ethernet cable from the SonicWall TZ170 LAN Interface port 2 and connect it to the OPT interface of the SonicWall TZ170 (opt. zone port).

9. Launch Internet Explorer version 6.x (or another browser that supports 128 bit encryption)

10. Type the following IP Address **10.10.10.100** in the browser address location. This displays the SonicWall TZ170 Login screen.

11. Login using your ID Name and Password.

    ID Name: **admin**
    Password: *password*

Proceed to the next page to configure the LAN interface.

Configuring the LAN Interface:

The LAN Interface is connected to the NWSNet. Edit the LAN interface with the routable IP Address provided from the Regional headquarters.

1. Click on **Network** located on the left margin.

2. Click on the **Interfaces** folder located on the left margin (Figure 9), if not already opened.
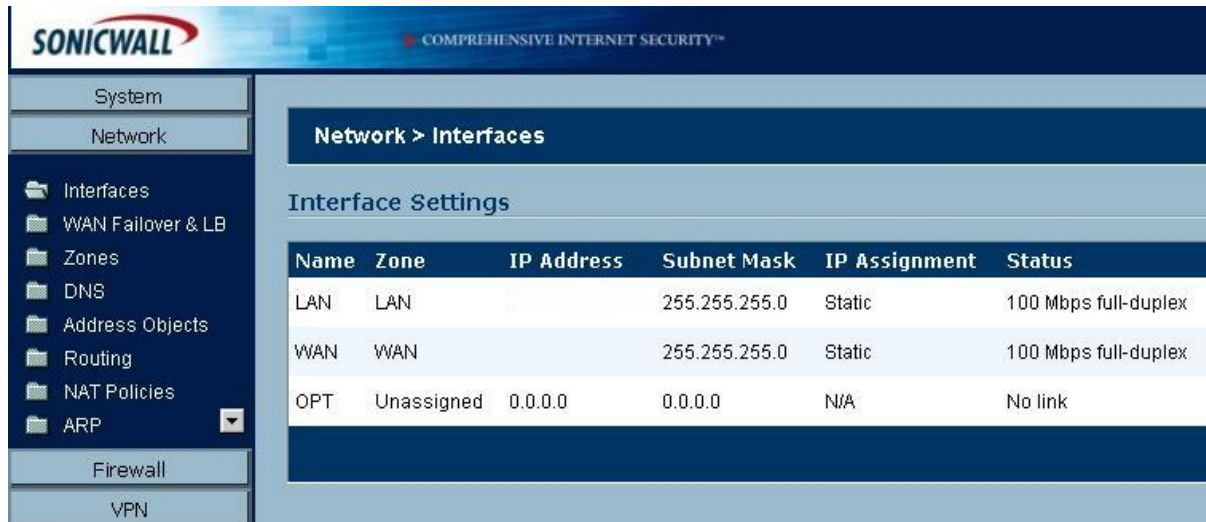
3. Click on the *Configure* icon ( ) in the LAN Interface row (towards the right margin) to edit the interface.

4. Edit the (NWSNet) LAN Interface with the site specific IP information (see Figure 12):

    Zone: **LAN**

    IP Address: (See Attachment C)

    Subnet Mask: (See Attachment C)

    Comment: **Default LAN**

    Management: check **HTTP**, **HTTPS**, and **Ping**

    User Login: leave all **UNCHECKED**

Figure 12: Edit LAN Settings

NOTE:	Figure 12 is an example. Each WFO Site has their own routable IP Address to the NWSNet, to be entered into the "IP Address:" field as defined in Attachment C.

5. Click on **OK** at the bottom to save the changes.

Proceed to the next page to configure the WAN interface.

Configuring the WAN Interface:

Edit the WAN interface with the private IP address provided from the ROC. This IP address is from the BDDS Network: 192.168.*x*.26. The DOD Radar sites have the following network: 172. 25.*x*.22

1. Click on **Network** located on the left margin.

2. Click on the **Interfaces** folder located on the left margin, if not already opened (Figure 9).

3. Click on the *Configure* icon (   ) in the WAN Interface row (towards the right margin) to edit the interface.

4. Edit the (BDDS) WAN Interface with the site specific IP information from Attachment C (Figure 13):

    Zone: **WAN**

    IP Assignment: **Static**

    IP Address: **192.168.*xx*.26** (See Attachment C)

    Subnet Mask: **255.255.255.0**

    Default Gateway: **192.168.*xx*.22** (See Attachment C)

    DNS Server 1: **0.0.0.0**

    DNS Server 2: **0.0.0.0**

    DNS Server 3: **0.0.0.0**

    Comment: **Default WAN**

    Management: leave all **UNCHECKED**

    User Login: leave all **UNCHECKED**

NOTE: The "Default Gateway" is the WFO_BDDS_LDM Server IP Address.

Figure 13: Edit WAN Settings

NOTE:	Figure 13 is an example. Each WFO site has their own IP address, to be entered in the "IP Address:" and the "Default Gateway:" fields as defined in Attachment C.
	There is no management from the WAN Interfaces. **Do not select** any of the management options.

5. Click on **OK** at the bottom to save the changes.

Static Route:

(Located under NETWORK/ROUTING menu)

A static route needs to be configured to enable traffic to be routed to the Regional LDM Servers. The following Networks and Subnet Masks for each Region are defined below (see Table 1):

Region:	Destination Network:	Subnet Mask:
CRH	204.227.126.0	255.255.255.0
WRH	205.124.249.240	255.255.255.240
ERH	216.38.95.0	255.255.255.128
SRH	216.38.80.0	255.255.255.0

Table 1

1. Click on **Network** located on the left margin.

2. Click on the **Routing** folder located on the left margin (Figure 14).

Figure 14: Routing Menu

3. Click on **Add** for Static Routes.

4. Configure the Static Route for your region (Figure 15):

      Destination Network: (See Table 1)
      Subnet Mask: (See Table 1)
      Gateway: (See Attachment C - Gateway NWSNet Router)
      Interface: **LAN**
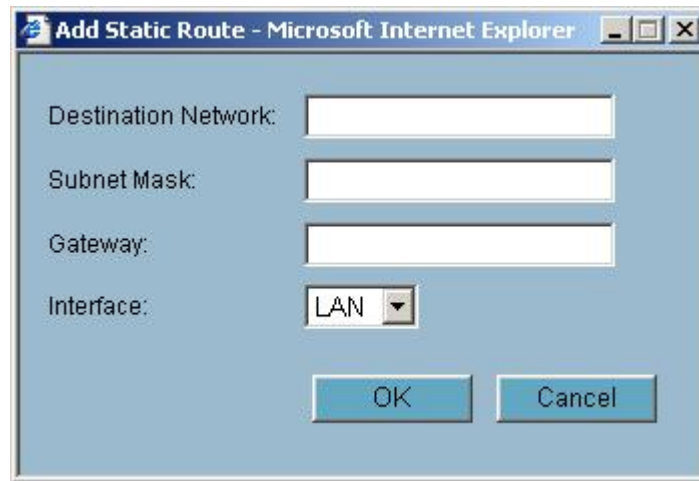
Figure 15: Add Static Route Window

5. Click **OK** at the bottom to save the changes.

Address Objects:
(Located under NETWORK/ADDRESS OBJECTS menu)

The Address Objects are created to allow the SonicWall TZ170 to set up policies and access rules by defining the Hosts / LDM Servers on each network.

Region:	Regional_LDM_1	Regional_LDM_2	Regional_LDM_Floater
CRH	204.227.126.61	204.227.126.62	204.227.126.60
WRH	205.124.249.243	205.124.249.244	205.124.249.245
ERH	216.38.95.10	216.38.95.11	216.38.95.9
SRH	216.38.80.16	216.38.80.17	216.38.80.15

Table 2

NOTE:	The WFO_BDDS_LDM Server IP addresses are defined in Attachment C.

1. Click on **Network** located on the left margin.

2. Click on the **Address Objects** folder.

3. Scroll down to **Address Object**, then click on **Add**.

4.   Add the Regional LDM Server 1 (Figure 16).

     Name: **Regional_LDM_1**

     Type: **Host**

     IP Address: (See Table 2, p.A-19)

     Netmask: **255.255.255.255**

     Zone Assignment: **LAN**

Figure 16: Add Regional LDM Server

NOTE:	The IP addresses are defined in Table 2 (p. A-19).

5.   Click **OK** at the bottom to save the changes.

6.   Scroll down to **Address Object**, then click on **Add**.

7.   Add the Regional LDM Server 2 (Figure 17).

     Name: **Regional_LDM_2**

     Type: **Host**

     IP Address: (See Table 2, p.A-19)

     Netmask: **255.255.255.255**

     Zone Assignment: **LAN**
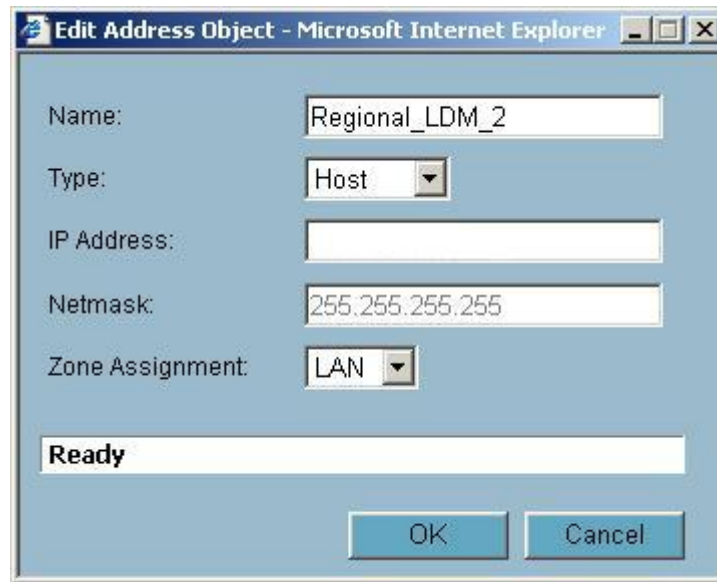
Figure 17: Add Second LDM Server

NOTE:	The IP addresses are defined in Table 2, (p.A-19).

8. Click **OK** at the bottom to save the changes.

9. Scroll down to **Address Object,** then click on **Add**.

10. Add the Regional LDM Floater IP Address (for Piranha; Figure 18).

    Name: **Regional_LDM_Floater**

    Type: **Host**

    IP Address: (See Table 2, p.A-19)

    Netmask: **255.255.255.255**

    Zone Assignment: **LAN**
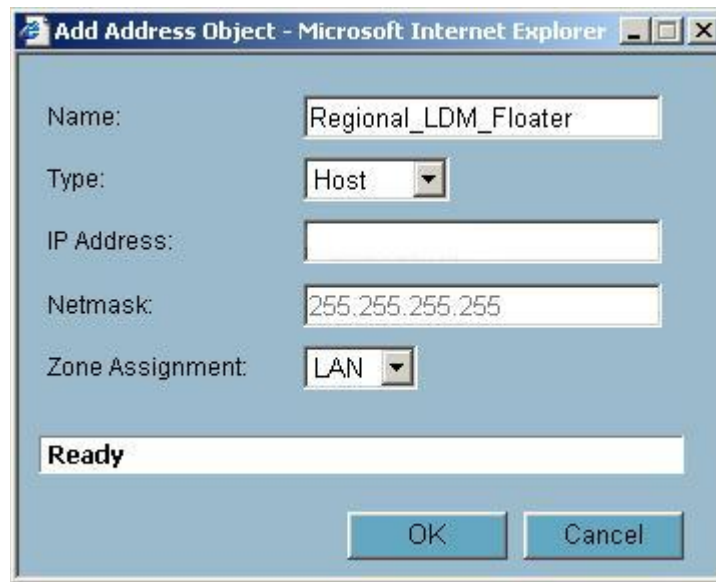
Figure 18: Add LDM Floater

NOTE:	The IP Addresses are defined in Table 2 (p.A-19).

11. Click **OK** at the bottom to save the changes.

12. Scroll up to **Address Group**, then click on **Add Group**.

13. Create an Object Group using all of the Regional LDM Servers (Figure 19).

     Name: **Regional_LDM_Servers**

     Select **Regional_LDM_1** and click the right arrow.

     Select **Regional_LDM_2** and click the right arrow.

     Select **Regional_LDM_Floater** and click the right arrow.
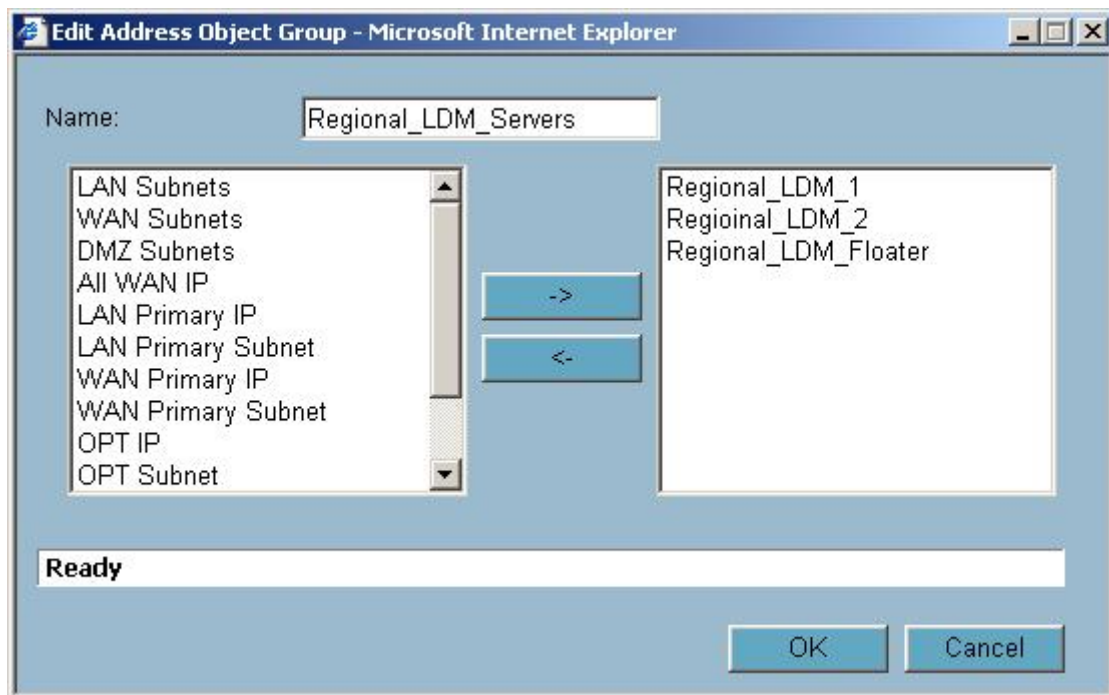
Figure 19: Edit Address Object Group

14. Click **OK** at the bottom to save the changes.

15. Scroll down to **Address Object**, then click on **Add**.

16. Add the Address Object, WFO BDDS LDM server (Figure 20).

      Name: **WFO_BDDS_LDM**

      Type: **Host**

      IP Address: (See Attachment C)

      Netmask: **255.255.255.255**

      Zone Assignment: **WAN**

Figure 20: Add BDDS LDM Server

NOTE:	The IP addresses are defined in Attachment C.

17. Click **OK** at the bottom to save the changes.

Firewall Services:
(Located under FIREWALL/SERVICES menu)

1. Click on **Firewall** located on the left margin.

2. Click on the **Services** folder.

3. Scroll down to **Service**, then click on **Add** (Figure 21).

NOTE: Add a *Service* -- **not** a *Service Group.*

The service that needs to be added is *TCP port 388*. LDM requires this port to transfer data from one LDM server to another.

Name: **LDM388**

Port Range: **388** to **388**

Protocol: **TCP**
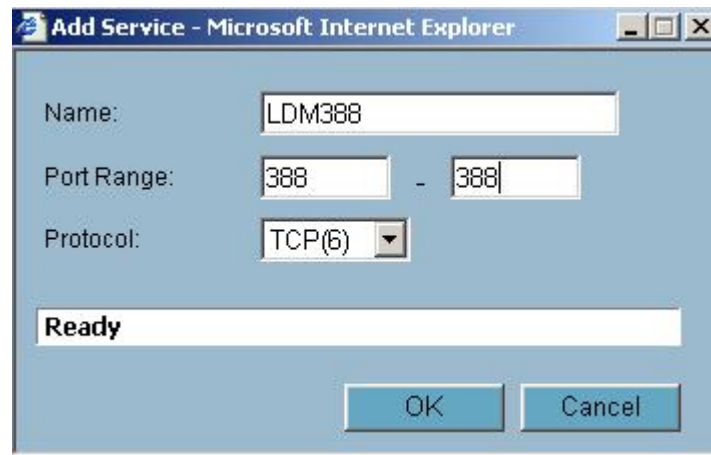
Figure 21: Add Service Window

4. Click **OK** to save the changes.

NAT Policies:
(Located under NETWORK / NAT POLICIES menu)

1. Click on **Network** located on the left margin.

2. Click on the **NAT Policies** folder.

3. Scroll down to the bottom, then click on **Add**.

The Network Address Translation is defined in NAT Policies.

4. Add a NAT policy for the regional LDM to the BDDS LDM (Figure 22):

      Original Source: **Regional_LDM_Servers**
      Translated Source: **WAN Primary IP**
      Original Destination: **LAN Primary IP**
      Translated Destination: **WFO_BDDS_LDM**
      Original Service: **LDM388**
      Translated Service: **LDM388**
      Inbound Interface: **Any**
      Outbound Interface: **Any**

Figure 22: Edit NAT Policy Window

5. Click on **OK** to save the policy.

6. Click **Add** again to create a second policy.

7. Add a NAT policy for the BDDS LDM to the regional LDM (Figure 23):

    Original Source: **WFO_BDDS_LDM**
    Translated Source: **LAN Primary IP**
    Original Destination: **WAN Primary IP**
    Translated Destination: **Regional_LDM_Servers**
    Original Service: **LDM388**
    Translated Service: **LDM388**
    Inbound Interface: **Any**
    Outbound Interface: **Any**

Figure 23

8. Click on **OK** to save the policy.

Access Rules:
(Located under the FIREWALL / ACCESS RULES menu)

The access rules allow LDM traffic to be permitted through the SonicWall TZ170.

1. Click on **Firewall** located on the left margin.

2. Click on the **Access Rules** folder.

3. In the Matrix view, click on the *Configure* icon (   ) for WAN to LAN. [WAN > LAN]

4. Click on **Add**.

5. Allow the LDM data to be permitted through the SonicWall TZ170. (Figure 24)

    Action: **Allow**
    Service: **ANY**
    Source: **WFO_BDDS_LDM**
    Destination: **Regional_LDM_Servers**
    Users Allowed: **All**
    Schedule: **Always On**
    Logging: **CHECK / YES**

NOTE:	In compliance with the Office of the CIO Security, the SonicWall TZ170 is configured as a NAT device. After the initial configuration setup is completed, the regional headquarters may lock down the device to service port 388 as shown in Figure 24 and must conform to the Office of the CIO system log guidelines.
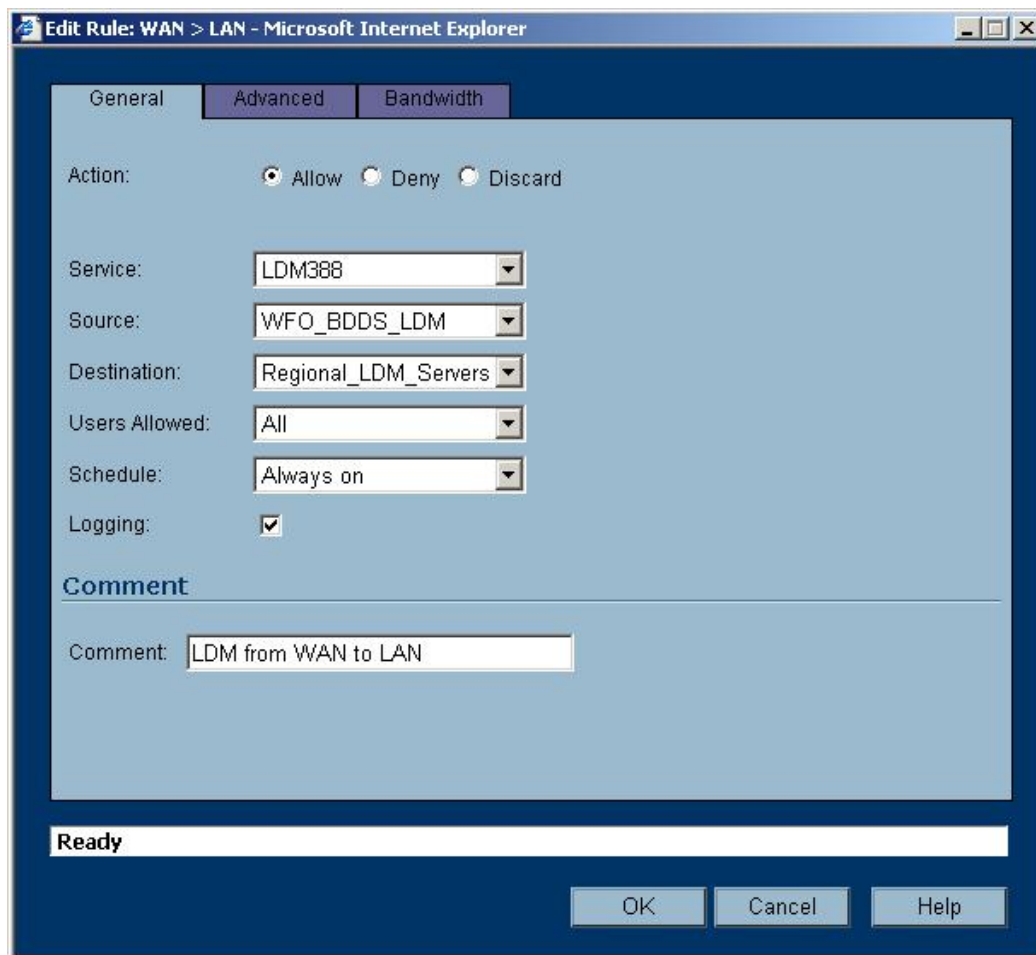
Figure 24: Edit Rule Window

6. Click on **OK** to save the changes.

Password Administration / Device Name:
(Located under SYSTEM/ADMINISTRATION menu)

1. Click on **System** located on the left margin.

2. Click on the **Administration** folder.

3. Change the Firewall Name to: *Radar Site ID – Serial Number.*

    Example: *KDDC-0006B104791C*

NOTE:	The SonicWall TZ170 name is defaulted to the Serial Number and can be found on the bottom of the device.

4. Change the default password by entering the Administrator ID and Password (Figure 25):

    Firewall Name: *Serial Number of the Device*
    Administrator Name: **admin**
    Old Password: **password**

Figure 25: Administration Window

5. Click on **Apply** to save the changes.

NOTE:	The new password adheres to the NWS Security Guidelines and DOC password policy. Inform the Regional headquarters of the new password using the phone.

Time Server:
(Located under SYSTEM/TIME menu)

The SonicWall TZ170 is configured to a time server to ensure that time stamps are accurate for all logs.

1. Click on **System** located on the left margin.

2. Click on the **Time** folder.

3. Under the NTP Server settings click on **Add**.

4. Enter in the NTP Server IP address (see Figure 26).

Figure 26: Add NTP Server

NOTE:	Confirm with your region if you are not familiar with the NTP Server IP Address. Most WFO NWSNet routers are configured with an NTP Server command.

5. Click on **OK** to save the changes.

6. Verify the time on the SonicWall TZ170.

Monitored Services/Logging:

All logging for the SonicWall TZ170 occurs locally on the device.

All untrusted connections to the BDDS LAN are terminated prior to the installation of the SonicWall TZ170. See Attachment F for a list of sites with external connections.

Periodic Maintenance:

Maintenance occurs when new software is available for the SonicWall TZ170 and it is beneficial to the customer to update the device.

Backup Information:

Percentage of volume/files backed up:	The entire configuration file.
Frequency of backup:	After any changes.

In order to be prepared for disasters such as hardware or software failures, backups must be done and stored in a safe location. Backups on the SonicWall TZ170 should be performed whenever changes are made to the configuration. To perform a system backup, it is important to be connected directly to the SonicWall TZ170 and have administrative rights.

1. Change the Laptop Ethernet Interface with the following configuration:
        IP Address: **10.10.10.200**
        Subnet Mask: **255.255.255.0**
        Default Gateway: **10.10.10.100**

2. Connect a straight-through Ethernet cable from the laptop to the SonicWall TZ170 OPT interface (opt. zone port).

3. Launch Internet Explorer version 6.x (or another browser that supports 128 bit encryption).

4. Type the IP Address **10.10.10.100** in the browser's *Address* location. This displays the SonicWall TZ170 Login screen.

5. Login using your ID Name and Password.

    ID Name: **admin**
    Password:

6. Click on **System** located on the top left margin.

7. Click on the **Settings** folder located on the left margin.

8. Click on **Export Settings** (Figure 27).

Figure 27: Settings Screen

9. Click on **Export** (Figure 28).

Figure 28: Export Settings

10. Click on **Save** (Figure 29).
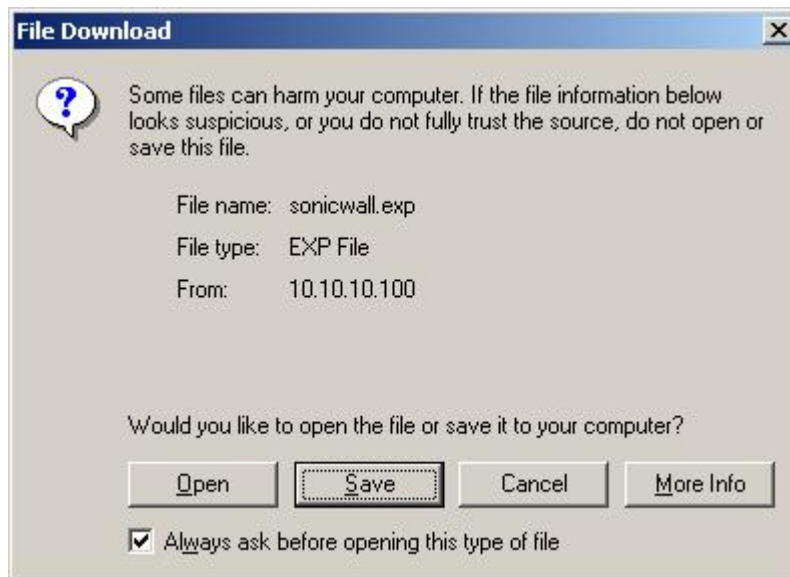
Figure 29: File Download Window

11. Use the following naming convention to save the configuration file.

RadarSID_Date.exp

Naming convention example for Boulder, Colorado WFO Radar Site on February 26, 2004:

KFTJ_02262004.exp

NOTE:	The configuration files are backups for the SonicWall TZ170. Backups should be done whenever permanent configuration changes are made.

12. Click on **Save** (Figure 30).
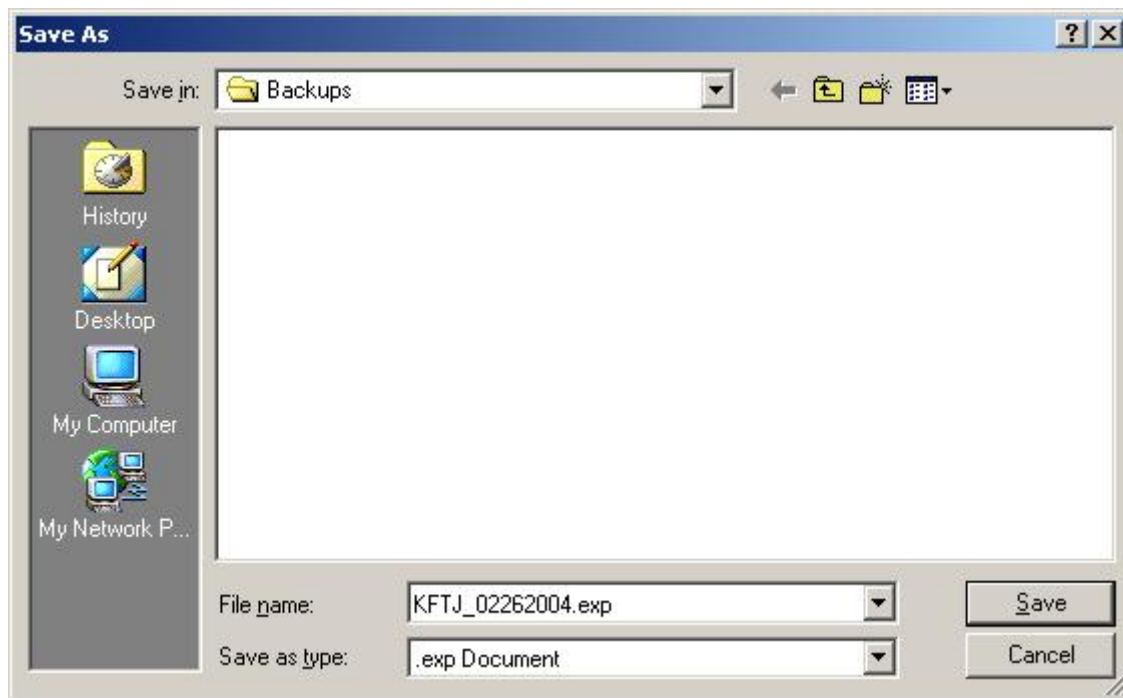
Figure 30: Save Window

13. Send a copy of the SonicWall configuration to your regional headquarters.

Contact your Region for detailed instructions on how to submit the configuration file:

Region:	Point of Contact:	E-mail:	Phone #
Central	Bill Gery	William.Gery@noaa.gov	(816) 891-7734 x414
Western	Graham Stork	Graham.Stork@noaa.gov	(801) 524-5120 x286
Eastern	Fred Pierce	Frederick.Pierce@noaa.gov	(631) 244-0152
Southern	Bruce Marshak	Bruce.Marshak@noaa.gov	(817) 978-1100 x146

Contact NSSL and OST:

Contact NSSL, regions and OS&T from 9am to 5pm (CST) Monday through Friday to verify the system is functioning properly. LDM traffic will be routed from the BDDS LDM server to the regional LDM servers.

NSSL	OST / SEC
Karen Cooper	Jami Casamento
E-Mail: karen.cooper@noaa.gov	jami.casamento@noaa.gov
Phone: (405) 366-0434	Phone: (301) 713-1570 x117

Region:	Point of Contact:	E-mail:	Phone #
Central	Bill Gery	William.Gery@noaa.gov	(816) 891-7734 x414
Western	Graham Stork Jeff Walker	Graham.Stork@noaa.gov Jeff.Walker@noaa.gov	(801) 524-5120 x286 (801) 524-5120 x278
Eastern	Fred Pierce Fortune Vilcko	Frederick.Pierce@noaa.gov Fortune.Vilcko@noaa.gov	(631) 244-0152 (631) 244-0157
Southern	Bruce Marshak Martin Garcia Eric Howieson	Bruce.Marshak@noaa.gov Martin.Garcia@noaa.gov Eric.Howieson@noaa.gov	(817) 978-1100 x146 (817) 978-7777 x137 (817) 978-7777 x137

CRAFT Network

If your site is connected to the CRAFT Network, contact Karen Cooper (NSSL) after the TZ170 is installed to ensure that duplicate data is not sent to Oklahoma University. Sending the data over the CRAFT Network and over the NWSNet causes the data to be corrupted. Karen will configure the regional LDM servers corresponding with Carl Sinclair (Oklahoma University).

Contact Information:

Karen Cooper	Carl Sinclair
E-Mail: karen.cooper@noaa.gov	csinclair@ou.edu
Phone: (405) 366-0434	**Phone: (405) 325-5938**

INSTALL COMPLETE!

Vendor Information:

Vendor Contact and Documentation

Vendor Name:	SonicWall Inc.
Vendor Address:	1143 Borregas Avenue Sunnyvale, CA 94089-1306
E-mail Address:	info@sonicwall.com
Vendor Phone Number:	1-408-745-9600
Vendor Documentation:	www.sonicwall.com

Technical Support Contacts:

Martin Sainsbury-Carter
Engineering Development & Support
Interlan Communication, Inc.
Email: mscarter@interlancom.com
Phone: 703-904-7090

SonicWall Support Center
Phone: 888-777-1476

NOTE: Be sure to have the SonicWall TZ170 serial number when calling support.

Sales Contacts:

Jason Watson
Eastern Sales Lead - Mid-Atlantic
SonicWALL, Inc.
Email: jwatson@sonicwall.com
Phone: 408.962.7073

Anthony Munno
Sales Manager
Interlan Communication, Inc.
Email: tmunno@interlancom.com
Phone: 703-904-7090
Cell: 703-505-9292

On-Line Documentation and Reference Web Sites

SonicWall Website:

http://www.sonicwall.com/

SonicWall TZ170 Product Datasheet:

http://www.sonicwall.com/services/pdfs/DS_0104_TZ170.pdf

SonicWall TZ170 Product Documentation:

http://www.sonicwall.com/services/tz170_documentation.html

Escalation Procedures:

Vendor Escalation Procedures

The SonicWall TZ170 comes with a one year warranty. For technical support, contact the following support center and engineers:

Martin Sainsbury-Carter
Engineering Development & Support
Interlan Communication, Inc.
Email: mscarter@interlancom.com
Phone: 703-904-7090

SonicWall Support Center
Phone: 888-777-1476

NOTE: Be sure to have the SonicWall TZ170 serial number when calling support.

Internal Escalation Procedures

Escalation to NRC/NLSC should occur when there is a hardware failure that the engineering group cannot resolve. The SonicWall TZ170 will be replaced.

NLSC
1510 East Bannister Rd.
Building 1
KC, Missouri 64131

Warehouse Operations: 816-926-7993
NWS Representative / Liaison: 816-926-1820

NRC
Repair Operations: 816-926-3217

Attachment B - List of Affected Sites

NWS - Central Region (39 Sites)

NEXRAD Site Name	City, ST	EQP	SID	ORG
ABERDEEN	ABERDEEN, SD	RPG	ABR	WR9659
BISMARCK	BISMARCK, ND	RPG	BIS	WR9764
CHEYENNE	CHEYENNE, WY	RPG	CYS	WR9564
CHICAGO	ROMEOVILLE, IL	RPG	LOT	WR9969
DENVER	BOULDER, CO	RPG	BOU	WR9469
DES MOINES	JOHNSTON, IA	RPG	DMX	WR9546
DETROIT	WHITE LAKE, MI	RPG	DTX	WR9954
DODGE CITY	DODGE CITY, KS	RPG	DDC	WR9451
DULUTH	DULUTH, MN	RPG	DLH	WR9745
EVANSVILLE,IN	PADUCAH, KY	RPG	PAH	WR9957
PADUCAH	PADUCAH, KY	RPG	PAH	WR9957
FARGO/GRAND FORKS	GRAND FORKS, ND	RPG	FGF	WR9750
GOODLAND	GOODLAND, KS	RPG	GLD	WR9465
GRAND ISLAND	HASTINGS, NE	RPG	GID	WR9552
GRAND JUNCTION	GRAND JUNCTION, CO	RPG	GJT	WR9476
GRAND RAPIDS	GRAND RAPIDS, MI	RPG	GRR	WR9635
GREEN BAY	GREEN BAY, WI	RPG	GRB	WR9645
INDIANAPOLIS	INDIANAPOLIS, IN	RPG	IND	WR9438
JACKSON, KY	JACKSON, KY	RPG	JKL	WR9956
LA CROSSE	LA CROSSE, WI	RPG	ARX	WR9643
LINCOLN	LINCOLN, IL	RPG	ILX	WR9436
LOUISVILLE	LOUISVILLE, KY	RPG	LMK	WR9423
MARQUETTE	NEGAUNEE, MI	RPG	MQT	WR9743
MILWAUKEE	DOUSMAN, WI	RPG	MKX	WR9965
MINNEAPOLIS	CHANHASSEN, MN	RPG	MPX	WR9658
NCL MICHIGAN	GAYLORD, MI	RPG	APX	WR9610
NORTH PLATTE	NORTH PLATTE, NE	RPG	LBF	WR9562
NORTHERN INDIANA	NORTH WEBSTER, IN	RPG	IWX	WR9534
OMAHA	VALLEY, NE	RPG	OAX	WR9553
PLEASANT HILL	PLEASANT HILL, MO	RPG	EAX	WR9446
PUEBLO	PUEBLO, CO	RPG	PUB	WR9464
QUAD CITIES	DAVENPORT, IA	RPG	DVN	WR9544
RAPID CITY	RAPID CITY, SD	RPG	UNR	WR9662
RIVERTON/LANDER	RIVERTON, WY	RPG	RIW	WR9576
SIOUX FALLS	SIOUX FALLS, SD	RPG	FSD	WR9651
SPRINGFIELD	SPRINGFIELD, MO	RPG	SGF	WR9440
ST LOUIS	WELDON SPRING, MO	RPG	LSX	WR9971
TOPEKA	TOPEKA, KS	RPG	TOP	WR9456
WICHITA	WICHITA, KS	RPG	ICT	WR9450

NWS - Western Region (27 Sites)

NEXRAD Site Name	City, ST	EQP	SID	ORG
BILLINGS	BILLINGS, MT	RPG	BYZ	WT9677
BOISE	BOISE, ID	RPG	BOI	WT9681
CEDAR CITY	SALT LAKE CITY, UT	RPG	SLC	WT9932
SALT LAKE CITY	SALT LAKE CITY, UT	RPG	SLC	WT9932
ELKO	ELKO, NV	RPG	LKN	WT9903
EUREKA (BUNKER HILL)	EUREKA, CA	RPG	EKA	WT9594
FLAGSTAFF	BELLEMONT, AZ	RPG	FGZ	WT9375
GLASGOW	GLASGOW, MT	RPG	GGW	WT9768

GREAT FALLS	GREAT FALLS, MT	RPG	TFX	WT9950
LAS VEGAS	LAS VEGAS, NV	RPG	VEF	WT9386
LOS ANGELES	OXNARD, CA	RPG	LOX	WT9295
MEDFORD	MEDFORD, OR	RPG	MFR	WT9597
MISSOULA	MISSOULA, MT	RPG	MSO	WT9773
PENDLETON	PENDLETON, OR	RPG	PDT	WT9688
PHOENIX	PHOENIX, AZ	RPG	PSR	WT9278
YUMA	PHOENIX, AZ	RPG	PSR	WT9278
POCATELLO	POCATELLO, ID	RPG	PIH	WT9578
PORTLAND, OR	PORTLAND, OR	RPG	PQR	WT9698
RENO	RENO, NV	RPG	REV	WT9488
SACRAMENTO	SACRAMENTO, CA	RPG	STO	WT9914
SAN DIEGO	SAN DIEGO, CA	RPG	SGX	WT9918
SANTA ANA MTS	SAN DIEGO, CA	RPG	SGX	WT9918
SAN FRANCISCO	MONTEREY, CA	RPG	MTR	WT9933
SAN JOAQUIN VALY	HANFORD, CA	RPG	HNX	WT9389
SEATTLE	SEATTLE, WA	RPG	SEW	WT9922
SPOKANE	SPOKANE, WA	RPG	OTX	WT9785
TUCSON	TUCSON, AZ	RPG	TWC	WT9274

NWS - Eastern Region (23 Sites)

NEXRAD Site Name	City, ST	EQP	SID	ORG
ALBANY	ALBANY, NY	RPG	ALY	WN9518
BINGHAMTON	JOHNSON CITY, NY	RPG	BGM	WN9515
BOSTON	TAUNTON, MA	RPG	BOX	WN9509
BROOKHAVEN	UPTON, NY	RPG	OKX	WN9912
BUFFALO	BUFFALO, NY	RPG	BUF	WN9528
BURLINGTON	SOUTH BURLINGTON, VT	RPG	BTV	WN9617
CARIBOU	CARIBOU, ME	RPG	CAR	WN9712
CHARLESTON, SC	CHARLESTON, SC	RPG	CHS	WN9208
CHARLESTON, WV	CHARLESTON, WV	RPG	RLX	WN9414
CINCINNATI	WILMINGTON, OH	RPG	ILN	WN9710
CLEVELAND	CLEVELAND, OH	RPG	CLE	WN9524
COLUMBIA	WEST COLUMBIA, SC	RPG	CAE	WN9310
GREER	GREER, SC	RPG	GSP	WN9312
MOREHEAD CITY	NEWPORT, NC	RPG	MHX	WN9307
NORFOLK	WAKEFIELD, VA	RPG	AKQ	WN9952
PHILADELPHIA	MOUNT HOLLY, NJ	RPG	PHI	WN9950
PITTSBURGH	CORAOPOLIS, PA	RPG	PBZ	WN9917
PORTLAND, ME	GRAY, ME	RPG	GYX	WN9938
RALEIGH/DURHAM	RALEIGH, NC	RPG	RAH	WN9306
ROANOKE	BLACKSBURG, VA	RPG	RNK	WN9954
STATE COLLEGE	STATE COLLEGE, PA	RPG	CTP	WN9925
STERLING	STERLING, VA	RPG	LWX	WN9931
WILMINGTON	WILMINGTON, NC	RPG	ILM	WN9301

NWS - Southern Region (32 Sites)

NEXRAD Site Name	City, ST	EQP	SID	ORG
ALBUQUERQUE	ALBUQUERQUE, NM	RPG	ABQ	WP9365
AMARILLO	AMARILLO, TX	RPG	AMA	WP9363
ATLANTA	PEACHTREE CITY, GA	RPG	FFC	WP9219
AUSTIN/SAN ANTONIO	NEW BRAUNFELS, TX	RPG	EWX	WP9253
BIRMINGHAM	ALABASTER, AL	RPG	BMX	WP9957

BRANDON, MS	JACKSON, MS	RPG	JAN	WP9235
BROWNSVILLE	BROWNSVILLE, TX	RPG	BRO	WP9250
CORPUS CHRISTI	CORPUS CHRISTI, TX	RPG	CRP	WP9251
DALLAS/FT WORTH	FORT WORTH, TX	RPG	FWD	WP9259
EL PASO	SANTA TERESA, NM	RPG	EPZ	WP9270
HOUSTON	DICKINSON, TX	RPG	HGX	WP9935
JACKSONVILLE	JACKSONVILLE, FL	RPG	JAX	WP9206
KEY WEST	BOCA CHICA KEY, FL	RPG	BYX	WP9201
KNOXVILLE	MORRISTOWN, TN	RPG	MRX	WP9325
LAKE CHARLES	LAKE CHARLES, LA	RPG	LCH	WP9240
LITTLE ROCK	NORTH LITTLE ROCK, AR	RPG	LZK	WP9340
LUBBOCK	LUBBOCK, TX	RPG	LUB	WP9933
MELBOURNE	MELBOURNE, FL	RPG	MLB	WP9204
MEMPHIS	MEMPHIS, TN	RPG	MEG	WP9334
MIAMI	MIAMI, FL	RPG	MFL	WP9918
MIDLAND/ODESSA	MIDLAND, TX	RPG	MAF	WP9265
MOBILE	MOBILE, AL	RPG	MOB	WP9223
NASHVILLE	OLD HICKORY, TN	RPG	OHX	WP9327
NORMAN	NORMAN, OK	RPG	OUN	WP9921
NORTHEAST ALABAMA	HUNTSVILLE, AL	RPG	HUN	WP9914
SAN ANGELO	SAN ANGELO, TX	RPG	SJT	WP9263
SHREVEPORT	SHREVEPORT, LA	RPG	SHV	WP9248
SLIDELL	SLIDELL, LA	RPG	LIX	WP9919
TALLAHASSEE	TALLAHASSEE, FL	RPG	TLH	WP9214
TAMPA	RUSKIN, FL	RPG	TBW	WP9961
TULSA	TULSA, OK	RPG	TSA	WP9356
WESTERN ARKANSAS	TULSA, OK	RPG	TSA	WP9356

DOD

NEXRAD Site Name	City, ST	EQP	SID	ORG
ALTUS AFB	FREDERICK, OK	RPG	FDR	FE4419
CANNON AFB	FIELD, NM	RPG	FDX	FE4855
COLUMBUS AFB	GREENWOOD SPRINGS, MS	RPG	GWX	FE3022
DOVER AFB	ELLENDALE STATE FOREST, DE	RPG	DOX	FE4497
DYESS AFB	MORAN, TX	RPG	DYX	FE4661
EGLIN AFB	RED BAY, FL	RPG	EVX	FE2823
FT DRUM	MONTAGUE, NY	RPG	TYX	FY4846
HOLLOMAN AFB	RUIDOSO, NM	RPG	HDX	FE4801
LAUGHLIN AFB	BRACKETVILLE, TX	RPG	DFX	FE3099
ROBINS AFB	JEFFERSONVILLE, GA	RPG	JGX	FE2067
VANCE AFB	CHEROKEE, OK	RPG	VNX	FE3029

Attachment C – Site-specific IP Addresses

CENTRAL REGION

Central Region LDM Servers
LDM Server 1 = 204.227.126.61
LDM Server 2 = 204.227.126.62
Floater = 204.227.126.60

Radar	WFO SID	Radar SID	SONICWALL CONFIGURATION						Electronics POC	Phone Number
			LAN - NWSNet			WAN - BDDS LAN				
	SID	SID	IP Address	Netmask	Gateway	IP Address	Netmask	Gateway	POC	Number
			TZ170 LAN Port		NWSNet Router	TZ170 WAN Port		WFO_BDDS_LDM		
Aberdeen, SD	ABR	KABR	204.227.114.90	255.255.255.0	204.227.114.65	192.168.1.26	255.255.255.0	192.168.1.22	Alan Denniston	605-225-5547
Bismarck, ND	BIS	KBIS	204.227.116.90	255.255.255.0	204.227.116.65	192.168.12.26	255.255.255.0	192.168.12.22	Nadine Glur	701-250-4493
Boulder, CO	BOU	KFTJ	140.172.130.90	255.255.255.0	140.172.130.65	192.168.53.26	255.255.255.0	192.168.53.22	Robert Ladd	303-494-3210
Central Illinois, IL	ILX	KILX	204.227.100.90	255.255.255.0	204.227.100.65	192.168.73.26	255.255.255.0	192.168.73.22	Ed Martin	217-732-4029
Cheyenne, WY	CYS	KCYS	204.227.111.90	255.255.255.0	204.227.111.65	192.168.27.26	255.255.255.0	192.168.27.22	Don Turner	307-772-2468
Chicago, IL	LOT	KLOT	204.194.224.90	255.255.255.0	204.194.224.65	192.168.86.26	255.255.255.0	192.168.86.22	Tom Kretz	815-834-0600
Davenport, IA	DVN	KDVN	204.227.104.90	255.255.255.0	204.227.104.65	192.168.36.26	255.255.255.0	192.168.36.22	Bill Odar	319-386-7899
Des Moines, IA	DMX	KDMX	204.227.105.90	255.255.255.0	204.227.105.65	192.168.33.26	255.255.255.0	192.168.33.22	David Reese	515-270-4501
Detroit, MI	DTX	KDTX	204.194.225.90	255.255.255.0	204.194.225.65	192.168.35.26	255.255.255.0	192.168.35.22	Dave Paschal	248-625-3968
Dodge City, KS	DDC	LDDC	204.227.107.90	255.255.255.0	204.227.107.65	192.168.29.26	255.255.255.0	192.168.29.22	Mike Wagner	620-227-3700
Duluth, MN	DLH	KDLH	204.227.118.90	255.255.255.0	204.227.118.65	192.168.32.26	255.255.255.0	192.168.32.22	Don Price	218-729-0645
Evansville, IN	PAH	KVWX	204.227.99.89	255.255.255.0	204.227.99.65	192.168.151.26	255.255.255.0	192.168.151.22	Shane Luecke	270-744-6938
Gaylord, MI	APX	KAPX	204.227.123.90	255.255.255.0	204.227.123.65	192.168.6.26	255.255.255.0	192.168.6.22	Robert Weaver	989-731-1194
Goodland, KS	GLD	KGLD	204.227.125.90	255.255.255.0	204.227.125.65	192.168.57.26	255.255.255.0	192.168.57.22	Grady Bonsall	785-899-6412
Grand Forks, ND	FGF	KMVX	204.227.117.90	255.255.255.0	204.227.117.65	192.168.106.26	255.255.255.0	192.168.106.22	Mike Lukasz	701-772-0693
Grand Junction, CO	GJT	KGJX	204.227.110.90	255.255.255.0	204.227.110.65	192.168.56.26	255.255.255.0	192.168.56.22	Dan Milner	970-243-5348
Grand Rapids, MI	GRR	KGRR	204.227.124.90	255.255.255.0	204.227.124.65	192.168.60.26	255.255.255.0	192.168.60.22	Eric Damron	616-949-0643

Radar	WFO SID	Radar SID	SONICWALL CONFIGURATION						Electronics POC	Phone Number
			LAN - NWSNet			WAN - BDDS LAN				
			IP Address	Netmask	Gateway	IP Address	Netmask	Gateway		
			TZ170 LAN Port		NWSNet Router	TZ170 WAN Port		WFO_BDDS_LDM		
Green Bay, WI	GRB	KGRB	204.227.121.90	255.255.255.0	204.227.121.65	192.168.58.26	255.255.255.0	192.168.58.22	Lance Stockinger	920-494-7478
Hastings, NE	GID	KUEX	204.194.230.90	255.255.255.0	204.194.230.65	192.168.138.26	255.255.255.0	192.168.138.22	Susan Elmore	402-462-2734
Indianapolis, IN	IND	KIND	204.227.97.90	255.255.255.0	204.227.97.65	192.168.74.26	255.255.255.0	192.168.74.22	Curtis Tweed	317-856-0366
Jackson, KY	JKL	KJKL	208.193.168.90	255.255.255.0	208.193.168.65	192.168.81.26	255.255.255.0	192.168.81.22	Tim Stanley	606-666-2560
La Crosse, WI	ARX	KARX	204.227.122.90	255.255.255.0	204.227.112.65	192.168.7.26	255.255.255.0	192.168.7.22	Mike Struver	608-784-8275
Louisville, KY	LMK	KLVX	204.194.228.90	255.255.255.0	204.194.228.65	192.168.90.26	255.255.255.0	192.168.90.22	Bill Whitlock	502-968-4933
Marquette, MI	MQT	KMQT	204.227.120.90	255.255.255.0	204.227.120.65	192.168.101.26	255.255.255.0	192.168.101.22	John Rice	906-475-5782
Milwaukee, WI	MKX	KMKX	204.194.229.90	255.255.255.0	204.194.229.65	192.168.97.26	255.255.255.0	192.168.97.22	Kim Licitar	262-965-2197
Minneapolis, MN	MPX	KMPX	204.227.119.90	255.255.255.0	204.227.119.65	192.168.100.26	255.255.255.0	192.168.100.22	Bruce Aslesen	952-361-6670
North Platte, NE	LBF	KLNX	204.227.106.90	255.255.255.0	204.227.106.65	192.168.85.26	255.255.255.0	192.168.85.22	Alan Johnson	308-532-4936
Northern Indiana, IN	IWX	KIWX	204.194.231.90	255.255.255.0	204.194.231.65	192.168.77.26	255.255.255.0	192.168.77.22	Dan Keller	219-834-1183
Omaha, NE	OAX	KOAX	204.227.98.90	255.255.255.0	204.227.98.65	192.168.110.26	255.255.255.0	192.168.110.22	Larry Howard	402-359-5166
Paducah, KY	PAH	KPAH	204.227.99.90	255.255.255.0	204.227.99.65	192.168.114.26	255.255.255.0	192.168.114.22	Shane Luecke	270-744-6938
Pleasant Hill, MO	EAX	KEAX	204.227.103.90	255.255.255.0	204.227.103.65	192.168.38.26	255.255.255.0	192.168.38.22	John Tatum	816-540-5147
Pueblo, CO	PUB	KPUX	204.227.108.90	255.255.255.0	204.227.108.65	192.168.118.26	255.255.255.0	192.168.118.22	Ken Pavlik	719-948-0010
Rapid City, SD	UNR	KUDX	204.227.113.90	255.255.255.0	204.227.113.65	192.168.137.26	255.255.255.0	192.168.137.22	Paul Michael	605-341-9271
Riverton, WY	RIW	KRIW	204.227.112.90	255.255.255.0	204.227.112.65	192.168.121.26	255.255.255.0	192.168.121.22	Rob McFall	307-857-3898
Saint Louis, MO	LSX	KLSX	204.227.101.90	255.255.255.0	204.227.101.65	192.168.88.26	255.255.255.0	192.168.88.22	Neal Hill	314-447-1876
Sioux Falls, SD	FSD	KFSD	204.227.115.90	255.255.255.0	204.227.115.65	192.168.51.26	255.255.255.0	192.168.51.22	Don Beck	605-330-4244
Springfield, MO	SGF	KSGF	204.227.102.90	255.255.255.0	204.227.102.65	192.168.126.26	255.255.255.0	192.168.126.22	Steve Berry	417-863-2163
Topeka, KS	TOP	KTWX	204.194.226.90	255.255.255.0	204.194.226.65	192.168.135.26	255.255.255.0	192.168.135.22	Doug McHatton	785-232-1493
Wichita, KS	ICT	KICT	204.194.227.90	255.255.255.0	204.194.227.65	192.168.70.26	255.255.255.0	192.168.70.22	Ken Thompson	316-943-5248

WESTERN REGION

Western Region LDM Servers
LDM Server 1 = 205.124.249.243
LDM Server 2 = 205.124.249.244
Floater = 205.124.249.245

			SONICWALL CONFIGURATION							
	WFO	Radar	LAN - NWSNet			WAN - BDDS LAN			Electronics	Phone
Radar	SID	SID	IP Address	Netmask	Gateway	IP Address	Netmask	Gateway	POC	Number
			TZ170 LAN Port		NWSNet Router	TZ170 WAN Port		WFO_BDDS_LDM		
Billings, MT	BYZ	KBLX	204.228.182.176	255.255.255.0	204.228.182.1	192.168.13.26	255.255.255.0	192.168.13.22	Tony Browder	406-652-1314
Boise, ID	BOI	KCBX	198.200.151.95	255.255.255.0	198.200.151.1	192.168.21.26	255.255.255.0	192.168.21.22	Michael Pereira	208-334-9865
Ceder City, UT	SLC	KICX	199.104.104.104	255.255.255.0	199.104.104.98	192.168.71.26	255.255.255.0	192.168.71.22	Greg Wallace	801-524-5710
Elko, NV	LKN	KLRX	204.228.190.10	255.255.255.0	204.228.190.1	192.168.87.26	255.255.255.0	192.168.87.22	Herb Loell	775-778-6719
Eureka, CA	EKA	KBHX	204.228.181.76	255.255.255.0	204.228.181.1	192.168.11.26	255.255.255.0	192.168.11.22	Don Dodd	707-443-2309
Flagstaff, AZ	FGZ	KFSX	204.228.179.76	255.255.255.0	204.228.179.1	192.168.52.26	255.255.255.0	192.168.52.22	Doug Birck	520-556-9161
Glasgow, MT	GGW	KGGW	204.228.188.76	255.255.255.0	204.228.188.1	192.168.55.26	255.255.255.0	192.168.55.22	Craig Paju	406-228-2850
Great Falls, MT	TFX	KTFX	204.145.202.88	255.255.255.0	204.145.202.1	192.168.132.26	255.255.255.0	192.168.132.22	Doug Sherrick	406-454-1628
Hanford (San Joaquin), CA	HNX	KHNX	204.228.183.125	255.255.255.0	204.228.183.1	192.168.67.26	255.255.255.0	192.168.67.22	Mike Brittain	559-584-9051
Las Vegas, NV	VEF	KESX	204.228.184.96	255.255.255.0	204.228.184.1	192.168.43.26	255.255.255.0	192.168.43.22	John Grzner	702-263-9746
Medford, OR	MFR	KMAX	204.228.185.121	255.255.255.0	204.228.185.1	192.168.94.26	255.255.255.0	192.168.94.22	Darren Dixon	541-776-4303
Missoula, MT	MSO	KMSX	204.228.176.76	255.255.255.0	204.228.176.1	192.168.103.26	255.255.255.0	192.168.103.22	Ron Plumb	406-543-0922
Monterey (San Francisco), CA	MTR	KMUX	204.238.94.164	255.255.255.0	204.238.123.3	192.168.105.26	255.255.255.0	192.168.105.22	Tom Christian	831-656-1713
Oxnard (Los Angeles), CA	LOX	KVTX	204.30.214.29	255.255.255.0	204.30.214.1	192.168.142.26	255.255.255.0	192.168.142.22	Gary Strickland	805-988-6628
Pendleton, OR	PDT	KPDT	204.228.187.76	255.255.255.0	204.228.187.1	192.168.116.26	255.255.255.0	192.168.116.22	Rod Theis	541-276-7832
Phoenix, AZ	PSR	KIWA	148.126.101.94	255.255.255.0	148.126.101.2	192.168.76.26	255.255.255.0	192.168.76.22	Frank Stewert	602-379-4610
Pocatello, ID	PIH	KSFX	204.228.186.76	255.255.255.0	204.228.186.1	192.168.125.26	255.255.255.0	192.168.125.22	Richard Stork	208-232-9212
Portland, OR	PQR	KRTX	204.228.175.76	255.255.255.0	204.228.175.1	192.168.124.26	255.255.255.0	192.168.124.22	Bill Flieder	503-326-2340

			SONICWALL CONFIGURATION							
	WFO	Radar	LAN - NWSNet			WAN - BDDS LAN			Electronics	Phone
Radar	SID	SID	IP Address	Netmask	Gateway	IP Address	Netmask	Gateway	POC	Number
			TZ170 LAN Port		NWSNet Router	TZ170 WAN Port		WFO_BDDS_LDM		
Reno, NV	REV	KRGX	204.228.191.110	255.255.255.0	204.228.191.1	192.168.120.26	255.255.255.0	192.168.120.22	Duffy (Norman) Johnson	775-673-8102
Sacramento, CA	STO	KDAX	199.104.105.71	255.255.255.0	199.104.105.1	192.168.28.26	255.255.255.0	192.168.28.22	Doug Swann	916-979-3041
Salt Lake City, UT	SLC	KMTX	199.104.104.105	255.255.255.0	199.104.104.98	192.168.104.26	255.255.255.0	192.168.104.22	Greg Wallace	801-524-5710
San Diego, CA	SGX	KNKX	204.228.189.35	255.255.255.0	204.228.189.1	192.168.108.26	255.255.255.0	192.168.108.22	Mike Lauderdale	858-675-8700
Santa Anna Mnts, CA	SGX	KSOX	204.228.189.36	255.255.255.0	204.228.189.1	192.168.129.26	255.255.255.0	192.168.129.22	Mike Lauderdale	858-675-8700
Seattle, WA	SEW	KATX	161.55.224.93	255.255.255.0	161.55.224.101	192.168.8.26	255.255.255.0	192.168.8.22	Richard Pettipiece	206-526-6090
Spokane, WA	OTX	KOTX	204.228.178.76	255.255.255.0	204.228.178.1	192.168.113.26	255.255.255.0	192.168.113.22	Robert Cummings	509-244-0110
Tucson, AZ	TWC	KEMX	204.228.177.200	255.255.255.0	204.228.177.1	192.168.39.26	255.255.255.0	192.168.39.22	Jim Schmidt	520-670-6118
Yuma, AZ	PSR	KYUX	148.126.101.95	255.255.255.0	148.126.101.2	192.168.143.26	255.255.255.0	192.168.143.22	Frank Stewert	602-379-4610

EASTERN REGION

Eastern Region LDM Servers
LDM Server 1 = 216.38.95.10
LDM Server 2 = 216.38.95.11
Floater = 216.38.95.9

Radar	WFO SID	Radar SID	SONICWALL CONFIGURATION						Electronics POC	Phone Number
			LAN - NWSNet			WAN - BDDS LAN				
			IP Address	Netmask	Gateway	IP Address	Netmask	Gateway		
			TZ170 LAN Port		NWSNet Router	TZ170 WAN Port		WFO_BDDS_LDM		
Albany, NY	ALY	KENX	198.206.33.9	255.255.255.0	198.206.33.4	192.168.40.26	255.255.255.0	192.168.40.22	John Durant	518-435-9575
Binghamton, NY	BGM	KBGM	198.206.35.9	255.255.255.0	198.206.35.4	192.168.10.26	255.255.255.0	192.168.10.22	Ron Quillen	607-729-1597 x228
Boston, MA	BOX	KBOX	198.206.36.9	255.255.255.0	198.206.36.4	192.168.15.26	255.255.255.0	192.168.15.22	Don McKay	508-823-2444
Brookhaven, NY (New York City)	OKX	KOKX	198.206.47.9	255.255.255.0	198.206.47.4	192.168.112.26	255.255.255.0	192.168.112.22	Dean Covais	516-924-0494
Buffalo, NY	BUF	KBUF	198.206.37.9	255.255.255.0	198.206.37.4	192.168.17.26	255.255.255.0	192.168.17.22	Ed Holmes	716-565-0017
Burlington, VT	BTV	KCXX	198.206.38.9	255.255.255.0	198.206.38.4	192.168.26.26	255.255.255.0	192.168.26.22	John Compo	802-658-5684
Caribou, ME (Houlton)	CAR	KCBW	205.156.27.9	255.255.255.0	205.156.27.4	192.168.20.26	255.255.255.0	192.168.20.22	Tom Raineri	207-496-0143
Charleston, SC	CHS	KCLX	198.206.40.9	255.255.255.0	198.206.40.4	192.168.24.26	255.255.255.0	192.168.24.22	Brent Shirts	843-744-1411
Charleston, WV	RLX	KRLX	198.206.41.9	255.255.255.0	198.206.41.4	192.168.122.26	255.255.255.0	192.168.122.22	Dave Cunningham	304-746-0177
Cincinnati, OH (Wilmington)	ILN	KILN	198.206.42.9	255.255.255.0	198.206.42.4	192.168.72.26	255.255.255.0	192.168.72.22	Curtis Brooks	937-383-0136
Cleveland, OH	CLE	KCLE	198.206.43.9	255.255.255.0	198.206.43.4	192.168.23.26	255.255.255.0	192.168.23.22	Paul Svoboda	216-265-2380
Columbia, SC	CAE	KCAE	198.206.44.9	255.255.255.0	198.206.44.4	192.168.19.26	255.255.255.0	192.168.19.22	Don Spohn	803-765-5503
Dover, DE - Norfolk (DOD)	AKQ	KDOX	198.206.48.7	255.255.255.0	198.206.48.4	172.25.34.30	255.255.255.128	172.25.34.22	Doug Jones	757-899-5733
Greer, SC	GSP	KGSP	205.156.28.9	255.255.255.0	205.156.28.4	192.168.61.26	255.255.255.0	192.168.61.22	Frank Neiger	864-968-9695
Montague, NY - Fort Drum (DOD)	BTV	KTYX	198.206.38.7	255.255.255.0	198.206.38.4	172.25.136.30	255.255.255.128	172.25.136.22	John Compo	802-658-5684

Radar	WFO SID	Radar SID	SONICWALL CONFIGURATION						Electronics POC	Phone Number
			LAN - NWSNet			WAN - BDDS LAN				
			IP Address	Netmask	Gateway	IP Address	Netmask	Gateway		
			TZ170 LAN Port		NWSNet Router	TZ170 WAN Port		WFO_BDDS_LDM		
Morehead City, NC	MHX	KMHX	198.206.46.9	255.255.255.0	198.206.46.4	192.168.96.26	255.255.255.0	192.168.96.22	Mike Perdue	252-223-5007
Norfolk, VA (Wakefield)	AKQ	KAKQ	198.206.48.9	255.255.255.0	198.206.48.4	192.168.3.26	255.255.255.0	192.168.3.22	Doug Jones	757-899-5733
Philadelphia, PA	PHI	KDIX	198.206.49.9	255.255.255.0	198.206.49.4	192.168.31.26	255.255.255.0	192.168.31.22	Joe Byerly	609-261-6606 x228
Pittsburgh, PA	PBZ	KPBZ	198.206.50.9	255.255.255.0	198.206.50.4	192.168.115.26	255.255.255.0	192.168.115.22	Art Brown	412-262-1493
Portland, ME	GYX	KGYX	198.206.51.9	255.255.255.0	198.206.51.4	192.168.64.26	255.255.255.0	192.168.64.22	Chris McGrath	207-688-3225
Raleigh, NC	RAH	KRAX	198.206.52.9	255.255.255.0	198.206.52.4	192.168.119.26	255.255.255.0	192.168.119.22	Ron Simpson	919-515-8215
Roanoke, VA	RNK	KFCX	198.206.53.9	255.255.255.0	198.206.53.4	192.168.47.26	255.255.255.0	192.168.47.22	Bill Riehl	540-552-0084
State College, PA	CTP	KCCX	198.206.39.9	255.255.255.0	198.206.39.4	192.168.22.26	255.255.255.0	192.168.22.22	Suzy Bingham	814-234-9862
Sterling, VA	LWX	KLWX	198.206.34.9	255.255.255.0	198.206.34.4	192.168.91.26	255.255.255.0	192.168.91.22	Luc Gosselin	703-260-0107 x228
Wilmington, NC	ILM	KLTX	198.206.54.9	255.255.255.0	198.206.54.4	192.168.89.26	255.255.255.0	192.168.89.22	Rodney Parker	910-762-6258

SOUTHERN REGION

Southern Region LDM Servers
LDM Server 1 = 216.38.80.16
LDM Server 2 = 216.38.80.17
Floater = 216.38.80.15

			SONICWALL CONFIGURATION							
	WFO	Radar	LAN - NWSNet			WAN - BDDS LAN			Electronics	Phone
Radar	SID	SID	IP Address	Netmask	Gateway	IP Address	Netmask	Gateway	POC	Number
			TZ170 LAN Port		NWSNet Router	TZ170 WAN Port		WFO_BDDS_LDM		
Birmingham, AL	BMX	KBMX	205.165.4.178	255.255.255.248	205.165.4.177	192.168.14.26	255.255.255.0	192.168.14.22	John Peruzzo	205-621-5645
Albuquerque, NM	ABQ	KABX	205.165.4.42	255.255.255.248	205.165.4.41	192.168.2.26	255.255.255.0	192.168.2.22	Bobby Franco	505-244-9146
Albuquerque, NM - Cannon AFB (DOD)		KFDX	205.165.4.43	255.255.255.248	205.165.4.41	172.25.49.30	255.255.255.128	172.25.49.22		
Amarillo, TX	AMA	KAMA	205.165.4.74	255.255.255.248	205.165.4.73	192.168.4.26	255.255.255.0	192.168.4.22	Martin Garcia	806-335-2911
Brownsville, TX	BRO	KBRO	205.165.4.90	255.255.255.248	205.165.4.89	192.168.16.26	255.255.255.0	192.168.16.22	Alan Delcastillo	956-504-1750
San Juan, PR	SJU	TJUA	205.165.5.90	255.255.255.248	205.165.5.89	192.168.123.26	255.255.255.0	192.168.123.22	Robinson Cruz	787-253-8786
Corpus Christi, TX	CRP	KCRP	205.165.4.98	255.255.255.248	205.165.4.97	192.168.25.26	255.255.255.0	192.168.25.22	Don Parkerson	361-299-1358
Houston, TX	HGX	KHGX	205.165.4.114	255.255.255.248	205.165.4.113	192.168.66.26	255.255.255.0	192.168.66.22	Mike Kennedy	281-534-4736
Fort Worth, TX	FWD	KFWS	205.165.4.122	255.255.255.248	205.165.4.121	192.168.54.26	255.255.255.0	192.168.54.22	Doug Stewart	817-831-1265
Huntsville, AL	HUN	KHTX	205.165.4.194	255.255.255.248	205.165.4.193	192.168.69.26	255.255.255.0	192.168.69.22	Brian Burgess	256-890-8503
Jackson, MS	JAN	KDGX	205.165.4.170	255.255.255.248	205.165.4.169	192.168.78.26	255.255.255.0	192.168.78.22	Mike Ryan	601-965-4026
Jackson, MS - Columbus AFB (DOD)		KGWX	205.165.4.171	255.255.255.248	205.165.4.169	172.25.63.30	255.255.255.128	172.25.63.22		
Jacksonville, FL	JAX	KJAX	205.165.4.242	255.255.255.248	205.165.4.241	192.168.79.26	255.255.255.0	192.168.79.22	Wayne Davis	904-741-4411
Key West, FL	EYW	KBYX	205.165.5.82	255.255.255.248	205.165.5.81	192.168.18.26	255.255.255.0	192.168.18.22	Paul Schaafsma	305-295-1316

Radar	WFO SID	Radar SID	SONICWALL CONFIGURATION						Electronics	Phone
			LAN - NWSNet			WAN - BDDS LAN				
Radar	SID	SID	IP Address	Netmask	Gateway	IP Address	Netmask	Gateway	POC	Number
			TZ170 LAN Port		NWSNet Router	TZ170 WAN Port		WFO_BDDS_LDM		
Lake Charles, LA	LCH	KLCH	205.165.4.154	255.255.255.248	205.165.4.153	192.168.83.26	255.255.255.0	192.168.83.22	Danny Dowden	337-477-9023
Lubbock, TX	LUB	KLBB	205.165.4.66	255.255.255.248	205.165.4.65	192.168.82.26	255.255.255.0	192.168.82.22	Carl Hill	806-745-4354
Melbourne, FL	MLB	KMLB	205.165.4.250	255.255.255.248	205.165.4.249	192.168.98.26	255.255.255.0	192.168.98.22	Roger Willis	407-259-7745
Memphis, TN	MEG	KNQA	205.165.4.202	255.255.255.248	205.165.4.201	192.168.109.26	255.255.255.0	192.168.109.22	Maggie Trippany	901-544-0413
Miami, FL	MFL	KAMX	205.165.5.74	255.255.255.248	205.165.5.73	192.168.5.26	255.255.255.0	192.168.5.22	Walt Cowan	305-229-4506
Midland / Odessa, TX	MAF	KMAF	205.165.4.58	255.255.255.248	205.165.4.57	192.168.93.26	255.255.255.0	192.168.93.22	Wayne Patterson	432-563-5960
Mobile, AL	MOB	KMOB	205.165.4.186	255.255.255.248	205.165.4.185	192.168.99.26	255.255.255.0	192.168.99.22	Ron Lee	334-633-8705
Mobile, AL - Eglin AFB (DOD)		KEVX	205.165.4.187	255.255.255.248	205.165.4.185	172.25.44.30	255.255.255.128	172.25.44.22		
Knoxville, TN	MRX	KMRX	205.165.4.218	255.255.255.248	205.165.4.217	192.168.102.26	255.255.255.0	192.168.102.22	Eddie Maynard	423-586-4067
Austin / San Antonio, TX	EWX	KEWX	205.165.4.106	255.255.255.248	205.165.4.105	192.168.45.26	255.255.255.0	192.168.45.22	Jose Villescaz	830-629-0213
San Antonio, TX - Laughlin AFB (DOD)		KDFX	205.165.4.107	255.255.255.248	205.165.4.105	172.25.30.30	255.255.255.128	172.25.30.22		
Norman, OK	OUN	KTLX	205.165.4.26	255.255.255.240	205.165.4.25	192.168.134.26	255.255.255.0	192.168.134.22	Jeff Williams	405-366-6583
Norman, OK - Altus AFB (DOD)		KFDR	205.165.4.27	255.255.255.240	205.165.4.25	172.25.48.30	255.255.255.128	172.25.48.22		
Norman, OK - Vance AFB (DOD)		KVNX	205.165.4.28	255.255.255.240	205.165.4.25	172.25.141.30	255.255.255.128	172.25.141.22		
Little Rock, AR	LZK	KLZK	205.165.4.138	255.255.255.248	205.165.4.137	192.168.92.26	255.255.255.0	192.168.92.22	Dean Klimt	501-834-9102
Nashville, TN	OHX	KOHX	205.165.4.210	255.255.255.248	205.165.4.209	192.168.111.26	255.255.255.0	192.168.111.22	Steve Clark	615-754-8501
Atlanta, GA	FFC	KFFC	205.165.4.226	255.255.255.248	205.165.4.225	192.168.50.26	255.255.255.0	192.168.50.22	Richard Black	770-486-0430
Atlanta, GA - Robbins AFB (DOD)		KJDX	205.165.4.227	255.255.255.248	205.165.4.225	172.25.80.30	255.255.255.128	172.25.80.22		
Tampa Bay, FL	TBW	KTBW	205.165.5.66	255.255.255.248	205.165.5.65	192.168.131.26	255.255.255.0	192.168.131.22	Tony Harper	813-645-4111
San Angelo, TX	SJT	KSJT	205.165.4.82	255.255.255.248	205.165.4.81	192.168.128.26	255.255.255.0	192.168.128.22	Paul Burke	325-944-3030
San Angelo, TX - Dyess AFB (DOD)		KDYX	205.165.4.83	255.255.255.248	205.165.4.81	172.25.37.30	255.255.255.128	172.25.37.22		

Radar	WFO SID	Radar SID	SONICWALL CONFIGURATION						Electronics POC	Phone Number
			LAN - NWSNet			WAN - BDDS LAN				
			IP Address	Netmask	Gateway	IP Address	Netmask	Gateway		
			TZ170 LAN Port		NWSNet Router	TZ170 WAN Port		WFO_BDDS_LDM		
Slidell / New Orleans, LA	LIX	KLIX	205.165.4.162	255.255.255.248	205.165.4.161	192.168.84.26	255.255.255.0	192.168.84.22	Wayne Hall	504-645-0565
Tallahassee, FL	TLH	KTLH	205.165.4.234	255.255.255.248	205.165.4.233	192.168.133.26	255.255.255.0	192.168.133.22	Ken Morris	850-942-8836
Tulsa, OK	TSA	KINX	205.165.4.130	255.255.255.248	205.165.4.129	192.168.75.26	255.255.255.0	192.168.75.22	Isahia Daniels	918-832-4113

Attachment D - Sites Holding LDM Servers

Disposition of WSR-88D Level II Data LDM/Data Compression PCs after Sites Successfully Connect the BDDS to the NWSNet Via the TZ170

NWS

Eastern Region

Radar Site Name	City, ST	WHERE TO SEND PC (See Shipping Location Codes)
ALBANY	ALBANY, NY	LL
BINGHAMTON	JOHNSON CITY, NY	LL
BOSTON	TAUNTON, MA	LL
BROOKHAVEN	UPTON, NY	LL
BUFFALO	BUFFALO, NY	LL
BURLINGTON	SOUTH BURLINGTON, VT	NSSL
CARIBOU	CARIBOU, ME	NSSL
CHARLESTON, SC	CHARLESTON, SC	NSSL
CHARLESTON, WV	CHARLESTON, WV	LL
CINCINNATI	WILMINGTON, OH	LL
CLEVELAND	CLEVELAND, OH	LL
COLUMBIA	WEST COLUMBIA, SC	NSSL
GREER	GREER, SC	NSSL
MOREHEAD CITY	NEWPORT, NC	NSSL
NORFOLK	WAKEFIELD, VA	NSSL
PHILADELPHIA	MOUNT HOLLY, NJ	LL
PITTSBURGH	CORAOPOLIS, PA	LL
PORTLAND, ME	GRAY, ME	NSSL
RALEIGH/DURHAM	RALEIGH, NC	NSSL
ROANOKE	BLACKSBURG, VA	LL
STATE COLLEGE	STATE COLLEGE, PA	LL
STERLING	STERLING, VA	LL
WILMINGTON	WILMINGTON, NC	NSSL

Southern Region

Radar Site Name	City, ST	WHERE TO SEND PC (See Shipping Location Codes)
ALBUQUERQUE	ALBUQUERQUE, NM	LL
AMARILLO	AMARILLO, TX	NSSL (CRAFT)
ATLANTA	PEACHTREE CITY, GA	NSSL
AUSTIN/SAN ANTONIO	NEW BRAUNFELS, TX	LL
BIRMINGHAM	ALABASTER, AL	UAH
BRANDON, MS	JACKSON, MS	NSSL
BROWNSVILLE	BROWNSVILLE, TX	NSSL
CORPUS CHRISTI	CORPUS CHRISTI, TX	NSSL
DALLAS/FT WORTH	FORT WORTH, TX	NSSL (CRAFT)
EL PASO	SANTA TERESA, NM	NSSL
HOUSTON	DICKINSON, TX	NSSL
JACKSONVILLE	JACKSONVILLE, FL	NSSL
KEY WEST	BOCA CHICA KEY, FL	NSSL
KNOXVILLE	MORRISTOWN, TN	NSSL

LAKE CHARLES	LAKE CHARLES, LA	NSSL
LITTLE ROCK	NORTH LITTLE ROCK, AR	NSSL
LUBBOCK	LUBBOCK, TX	NSSL (CRAFT)
MELBOURNE	MELBOURNE, FL	NASA
MEMPHIS	MEMPHIS, TN	NSSL
MIAMI	MIAMI, FL	NSSL
MIDLAND/ODESSA	MIDLAND, TX	NSSL
MOBILE	MOBILE, AL	NSSL
NASHVILLE	OLD HICKORY, TN	UAH
NORMAN	NORMAN, OK	NSSL (CRAFT)
NORTHEAST ALABAMA	HUNTSVILLE, AL	UAH
SAN ANGELO	SAN ANGELO, TX	NSSL
SHREVEPORT	SHREVEPORT, LA	NSSL
SLIDELL	SLIDELL, LA	NSSL
TALLAHASSEE	TALLAHASSEE, FL	NSSL
TAMPA	RUSKIN, FL	NASA
TULSA	TULSA, OK	NSSL (CRAFT)
WESTERN ARKANSAS	TULSA, OK	NSSL (CRAFT)

Central Region

Radar Site Name	City, ST	WHERE TO SEND PC (See Shipping Location Codes)
ABERDEEN	ABERDEEN, SD	NSSL
BISMARCK	BISMARCK, ND	NSSL
CHEYENNE	CHEYENNE, WY	FSL
CHICAGO	ROMEOVILLE, IL	LL
DENVER	BOULDER, CO	FSL
DES MOINES	JOHNSTON, IA	NSSL
DETROIT	WHITE LAKE, MI	LL
DODGE CITY	DODGE CITY, KS	FSL
DULUTH	DULUTH, MN	NSSL
EVANSVILLE, IN	PADUCAH, KY	NSSL
PADUCAH	PADUCAH, KY	NSSL
FARGO/GRAND FORKS	GRAND FORKS, ND	NSSL
GOODLAND	GOODLAND, KS	FSL
GRAND ISLAND	HASTINGS, NE	NSSL
GRAND JUNCTION	GRAND JUNCTION, CO	NSSL
GRAND RAPIDS	GRAND RAPIDS, MI	NSSL
GREEN BAY	GREEN BAY, WI	NSSL
INDIANAPOLIS	INDIANAPOLIS, IN	LL
JACKSON, KY	JACKSON, KY	NSSL
LA CROSSE	LA CROSSE, WI	NSSL
LINCOLN	LINCOLN, IL	LL
LOUISVILLE	LOUISVILLE, KY	LL
MARQUETTE	NEGAUNEE, MI	NSSL
MILWAUKEE	DOUSMAN, WI	LL
MINNEAPOLIS	CHANHASSEN, MN	NSSL
NCL MICHIGAN	GAYLORD, MI	NSSL
NORTH PLATTE	NORTH PLATTE, NE	NSSL
NORTHERN INDIANA	NORTH WEBSTER, IN	LL
OMAHA	VALLEY, NE	NSSL
PLEASANT HILL	PLEASANT HILL, MO	NSSL
PUEBLO	PUEBLO, CO	NSSL
QUAD CITIES	DAVENPORT, IA	LL
RAPID CITY	RAPID CITY, SD	NSSL
RIVERTON/LANDER	RIVERTON, WY	NSSL
SIOUX FALLS	SIOUX FALLS, SD	NSSL
SPRINGFIELD	SPRINGFIELD, MO	NSSL
ST LOUIS	WELDON SPRING, MO	LL

| TOPEKA | TOPEKA, KS | NSSL |
| WICHITA | WICHITA, KS | FSL |

Western Region

Radar Site Name	City, ST	WHERE TO SEND PC (See Shipping Location Codes)
BILLINGS	BILLINGS, MT	NSSL
BOISE	BOISE, ID	NSSL
CEDAR CITY	SALT LAKE CITY, UT	NSSL
SALT LAKE CITY	SALT LAKE CITY, UT	NSSL
ELKO	ELKO, NV	NSSL
EUREKA (BUNKER HILL)	EUREKA, CA	NASA
FLAGSTAFF	BELLEMONT, AZ	SRP
GLASGOW	GLASGOW, MT	NSSL
GREAT FALLS	GREAT FALLS, MT	NSSL
LAS VEGAS	LAS VEGAS, NV	SRP
LOS ANGELES	OXNARD, CA	NSSL
MEDFORD	MEDFORD, OR	NSSL
MISSOULA	MISSOULA, MT	NSSL
PENDLETON	PENDLETON, OR	NSSL
PHOENIX	PHOENIX, AZ	SRP
YUMA	PHOENIX, AZ	SRP
POCATELLO	POCATELLO, ID	NSSL
PORTLAND, OR	PORTLAND, OR	NSSL
RENO	RENO, NV	NSSL
SACRAMENTO	SACRAMENTO, CA	NSSL
SAN DIEGO	SAN DIEGO, CA	NSSL
SANTA ANA MTS	SAN DIEGO, CA	NSSL
SAN FRANCISCO	MONTEREY, CA	NSSL
SAN JOAQUIN VALY	HANFORD, CA	NSSL
SEATTLE	SEATTLE, WA	UW
SPOKANE	SPOKANE, WA	NSSL
TUCSON	TUCSON, AZ	SRP?

DoD

Radar Site Name	City, ST	WHERE TO SEND PC (See Shipping Location Codes)
ALTUS AFB	FREDERICK, OK	NSSL (CRAFT)
COLUMBUS AFB	GREENWOOD SPRINGS, MS	NSSL
VANCE AFB	CHEROKEE, OK	NSSL (CRAFT)

FAA
Radar Site Name
No LDM/Compression PCs At FAA Sites

Shipping Location Codes:
NSSL Or CRAFT: Send Hardware To:
> Mark Benner
> NSSL
> 1313 Halley Circle
> Norman, OK 73069
> 405-366-0520

FSL: Send Hardware To:
> Woody Roberts

FSL
> RM: 3C101
> 325 BROADWAY
> BOULDER CO 80305-3328
> PH: (303)497-6104

LL: Send Hardware To:
> MIT Lincoln Laboratory
> Attention Dave Broussard (S1-672)
> Building E Receiving
> 244 Wood Street
> Lexington, MA 02421
> 781-981-3526

NASA: Send Hardware To:
> David B. Wolff
> NASA/TRMM, Code 910.1
> Building 22, Room 380a
> Greenbelt, MD 20771
> Ph: 301-286-3767

UW (University of Washington): Send Hardware To:
> Prof. Harry Edmon
> Dept. of Atmospheric Sciences
> University of Washington
> Box 351640
> Seattle, WA 98195-1640

UAH (University of Alabama in Huntsville): Send Hardware To:
> Sandra H. Redman
> University of Alabama in Huntsville
> Information Technology Research Center
> National Space Science and Technology Center
> 320 Sparkman Dr.
> Huntsville, AL 35805-1912
> (256) 961-7806

SRP (Salt River Project): Do Not Send Hardware Until Further Notified Through NWS WR HQ

Attachment E – SonicWall TZ170 Shipping Schedule

NOTE:	The list below is color-coded based on the week of shipment.

NWS - Central Region (39 Sites)

NO.	NEXRAD Site Name	City, ST	SID	Est. Ship Date:	ORG
1	ABERDEEN	ABERDEEN, SD	ABR	COMPLETED	WR9659
2	BISMARCK	BISMARCK, ND	BIS	COMPLETED	WR9764
3	DODGE CITY	DODGE CITY, KS	DDC	COMPLETED	WR9451
4	FARGO/GRAND FORKS	GRAND FORKS, ND	FGF	Week of July 19th	WR9750
5	DES MOINES	JOHNSTON, IA	DMX	Week of July 19th	WR9546
6	DULUTH	DULUTH, MN	DLH	Week of July 19th	WR9745
7	EVANSVILLE,IN	PADUCAH, KY	PAH	Week of July 19th	WR9957
8	GRAND ISLAND	HASTINGS, NE	GID	Week of July 19th	WR9552
9	GRAND JUNCTION	GRAND JUNCTION, CO	GJT	Week of July 19th	WR9476
10	GRAND RAPIDS	GRAND RAPIDS, MI	GRR	Week of July 19th	WR9635
11	GREEN BAY	GREEN BAY, WI	GRB	Week of July 19th	WR9645
12	LA CROSSE	LA CROSSE, WI	ARX	Week of July 19th	WR9643
13	MARQUETTE	NEGAUNEE, MI	MQT	Week of July 19th	WR9743
14	MINNEAPOLIS	CHANHASSEN, MN	MPX	Week of July 19th	WR9658
15	NCL MICHIGAN	GAYLORD, MI	APX	Week of July 19th	WR9610
16	NORTH PLATTE	NORTH PLATTE, NE	LBF	Week of July 19th	WR9562
17	OMAHA	VALLEY, NE	OAX	Week of July 19th	WR9553
18	PLEASANT HILL	PLEASANT HILL, MO	EAX	Week of July 19th	WR9446
19	PUEBLO	PUEBLO, CO	PUB	Week of July 19th	WR9464
20	RAPID CITY	RAPID CITY, SD	UNR	Week of July 19th	WR9662
21	RIVERTON/LANDER	RIVERTON, WY	RIW	Week of July 19th	WR9576
22	SIOUX FALLS	SIOUX FALLS, SD	FSD	Week of July 19th	WR9651
23	SPRINGFIELD	SPRINGFIELD, MO	SGF	Week of July 19th	WR9440
24	CHEYENNE	CHEYENNE, WY	CYS	Week of Aug 2nd	WR9564
25	CHICAGO	ROMEOVILLE, IL	LOT	Week of Aug 2nd	WR9969
26	DENVER	BOULDER, CO	BOU	Week of Aug 2nd	WR9469
27	DETROIT	WHITE LAKE, MI	DTX	Week of Aug 2nd	WR9954
28	PADUCAH	PADUCAH, KY	PAH	Week of Aug 2nd	WR9957
29	GOODLAND	GOODLAND, KS	GLD	Week of Aug 2nd	WR9465
30	INDIANAPOLIS	INDIANAPOLIS, IN	IND	Week of Aug 2nd	WR9438
31	JACKSON, KY	JACKSON, KY	JKL	Week of Aug 2nd	WR9956
32	LINCOLN	LINCOLN, IL	ILX	Week of Aug 2nd	WR9436
33	LOUISVILLE	LOUISVILLE, KY	LMK	Week of Aug 2nd	WR9423
34	MILWAUKEE	DOUSMAN, WI	MKX	Week of Aug 2nd	WR9965
35	NORTHERN INDIANA	NORTH WEBSTER, IN	IWX	Week of Aug 2nd	WR9534
36	QUAD CITIES	DAVENPORT, IA	DVN	Week of Aug 2nd	WR9544
37	ST LOUIS	WELDON SPRING, MO	LSX	Week of Aug 2nd	WR9971
38	TOPEKA	TOPEKA, KS	TOP	Week of Aug 2nd	WR9456
39	WICHITA	WICHITA, KS	ICT	Week of Aug 2nd	WR9450

NWS - Western Region (27 Sites)

No.	NEXRAD Site Name	City, ST	SID	Est. Ship Date:	ORG
40	BILLINGS	BILLINGS, MT	BYZ	COMPLETED	WT9677
41	GLASGOW	GLASGOW, MT	GGW	COMPLETED	WT9768
42	YUMA	PHOENIX, AZ	PSR	COMPLETED	WT9278
43	BOISE	BOISE, ID	BOI	Week of July 19th	WT9681
44	ELKO	ELKO, NV	LKN	Week of July 19th	WT9903
45	GREAT FALLS	GREAT FALLS, MT	TFX	Week of July 19th	WT9950
46	LOS ANGELES	OXNARD, CA	LOX	Week of July 19th	WT9295
47	MEDFORD	MEDFORD, OR	MFR	Week of July 19th	WT9597
48	MISSOULA	MISSOULA, MT	MSO	Week of July 19th	WT9773
49	PENDLETON	PENDLETON, OR	PDT	Week of July 19th	WT9688
50	POCATELLO	POCATELLO, ID	PIH	Week of July 19th	WT9578
51	PORTLAND, OR	PORTLAND, OR	PQR	Week of July 19th	WT9698
52	SACRAMENTO	SACRAMENTO, CA	STO	Week of July 19th	WT9914
53	SAN DIEGO	SAN DIEGO, CA	SGX	Week of July 19th	WT9918
54	SANTA ANA MTS	SAN DIEGO, CA	SGX	Week of July 19th	WT9918
55	SAN JOAQUIN VALY	HANFORD, CA	HNX	Week of July 19th	WT9389
56	SPOKANE	SPOKANE, WA	OTX	Week of July 19th	WT9785
57	CEDAR CITY	SALT LAKE CITY, UT	SLC	Week of Aug 2nd	WT9932
58	SALT LAKE CITY	SALT LAKE CITY, UT	SLC	Week of Aug 2nd	WT9932
59	EUREKA (BUNKER HILL)	EUREKA, CA	EKA	Week of Aug 2nd	WT9594
60	FLAGSTAFF	BELLEMONT, AZ	FGZ	Week of Aug 2nd	WT9375
61	LAS VEGAS	LAS VEGAS, NV	VEF	Week of Aug 2nd	WT9386
62	PHOENIX	PHOENIX, AZ	PSR	Week of Aug 2nd	WT9278
63	RENO	RENO, NV	REV	Week of Aug 2nd	WT9488
64	SAN FRANCISCO	MONTEREY, CA	MTR	Week of Aug 2nd	WT9933
65	SEATTLE	SEATTLE, WA	SEW	Week of Aug 2nd	WT9922
66	TUCSON	TUCSON, AZ	TWC	Week of Aug 2nd	WT9274

NWS - Eastern Region (23 Sites)

No.	NEXRAD Site Name	City, ST	SID	Est. Ship Date:	ORG
67	BURLINGTON	SOUTH BURLINGTON, VT	BTV	COMPLETED	WN9617
68	CARIBOU	CARIBOU, ME	CAR	COMPLETED	WN9712
69	GREER	GREER, SC	GSP	Week of July 26th	WN9312
70	PORTLAND, ME	GRAY, ME	GYX	Week of July 26th	WN9938
71	ALBANY	ALBANY, NY	ALY	Week of Aug 9th	WN9518
72	BINGHAMTON	JOHNSON CITY, NY	BGM	Week of Aug 9th	WN9515
73	BOSTON	TAUNTON, MA	BOX	Week of Aug 9th	WN9509
74	BROOKHAVEN	UPTON, NY	OKX	Week of Aug 9th	WN9912
75	BUFFALO	BUFFALO, NY	BUF	Week of Aug 9th	WN9528
76	CHARLESTON, SC	CHARLESTON, SC	CHS	Week of Aug 9th	WN9208
77	CHARLESTON, WV	CHARLESTON, WV	RLX	Week of Aug 9th	WN9414
78	CINCINNATI	WILMINGTON, OH	ILN	Week of Aug 9th	WN9710
79	CLEVELAND	CLEVELAND, OH	CLE	Week of Aug 9th	WN9524
80	COLUMBIA	WEST COLUMBIA, SC	CAE	Week of Aug 9th	WN9310
81	MOREHEAD CITY	NEWPORT, NC	MHX	Week of Aug 9th	WN9307
82	NORFOLK	WAKEFIELD, VA	AKQ	Week of Aug 9th	WN9952
83	PHILADELPHIA	MOUNT HOLLY, NJ	PHI	Week of Aug 9th	WN9950
84	PITTSBURGH	CORAOPOLIS, PA	PBZ	Week of Aug 9th	WN9917
85	RALEIGH/DURHAM	RALEIGH, NC	RAH	Week of Aug 9th	WN9306
86	ROANOKE	BLACKSBURG, VA	RNK	Week of Aug 9th	WN9954
87	STATE COLLEGE	STATE COLLEGE, PA	CTP	Week of Aug 9th	WN9925
88	STERLING	STERLING, VA	LWX	Week of Aug 9th	WN9931
89	WILMINGTON	WILMINGTON, NC	ILM	Week of Aug 9th	WN9301

NWS - Southern Region (32 Sites)

No.	NEXRAD Site Name	City, ST	SID	Est. Ship Date:	ORG
90	ATLANTA	PEACHTREE CITY, GA	FFC	COMPLETED	WP9219
91	SAN ANGELO	SAN ANGELO, TX	SJT	COMPLETED	WP9263
92	BRANDON, MS	JACKSON, MS	JAN	Week of July 26th	WP9235
93	BROWNSVILLE	BROWNSVILLE, TX	BRO	Week of July 26th	WP9250
94	CORPUS CHRISTI	CORPUS CHRISTI, TX	CRP	Week of July 26th	WP9251
95	EL PASO	SANTA TERESA, NM	EPZ	Week of July 26th	WP9270
96	HOUSTON	DICKINSON, TX	HGX	Week of July 26th	WP9935
97	JACKSONVILLE	JACKSONVILLE, FL	JAX	Week of July 26th	WP9206
98	KEY WEST	BOCA CHICA KEY, FL	BYX	Week of July 26th	WP9201
99	KNOXVILLE	MORRISTOWN, TN	MRX	Week of July 26th	WP9325
100	LAKE CHARLES	LAKE CHARLES, LA	LCH	Week of July 26th	WP9240
101	LITTLE ROCK	NORTH LITTLE ROCK, AR	LZK	Week of July 26th	WP9340
102	MEMPHIS	MEMPHIS, TN	MEG	Week of July 26th	WP9334
103	MIAMI	MIAMI, FL	MFL	Week of July 26th	WP9918
104	MIDLAND/ODESSA	MIDLAND, TX	MAF	Week of July 26th	WP9265
105	SHREVEPORT	SHREVEPORT, LA	SHV	Week of July 26th	WP9248
106	TALLAHASSEE	TALLAHASSEE, FL	TLH	Week of July 26th	WP9214
107	TAMPA	RUSKIN, FL	TBW	Week of July 26th	WP9961
108	ALBUQUERQUE	ALBUQUERQUE, NM	ABQ	Week of Aug 9th	WP9365
109	AMARILLO	AMARILLO, TX	AMA	Week of Aug 9th	WP9363
110	AUSTIN/SAN ANTONIO	NEW BRAUNFELS, TX	EWX	Week of Aug 9th	WP9253
111	BIRMINGHAM	ALABASTER, AL	BMX	Week of Aug 9th	WP9957
112	DALLAS/FT WORTH	FORT WORTH, TX	FWD	Week of Aug 9th	WP9259
113	LUBBOCK	LUBBOCK, TX	LUB	Week of Aug 9th	WP9933
114	MELBOURNE	MELBOURNE, FL	MLB	Week of Aug 9th	WP9204
115	MOBILE	MOBILE, AL	MOB	Week of Aug 9th	WP9223
116	NASHVILLE	OLD HICKORY, TN	OHX	Week of Aug 9th	WP9327
117	NORMAN	NORMAN, OK	OUN	Week of Aug 9th	WP9921
118	NORTHEAST ALABAMA	HUNTSVILLE, AL	HUN	Week of Aug 9th	WP9914
119	SLIDELL	SLIDELL, LA	LIX	Week of Aug 9th	WP9919
120	TULSA	TULSA, OK	TSA	Week of Aug 9th	WP9356
121	WESTERN ARKANSAS	TULSA, OK	TSA	Week of Aug 9th	WP9356

DOD

No.	NEXRAD Site Name	City, ST	SID	Est. Ship Date:	ORG
122	CANNON AFB	FIELD, NM	FDX	TBD	FB4855
123	DOVER AFB	ELLENDALE STATE FOREST, DE	DOX	TBD	FB4497
124	DYESS AFB	MORAN, TX	DYX	TBD	FB4661
125	EGLIN AFB	RED BAY, FL	EVX	TBD	FB2823
126	FT DRUM	MONTAGUE, NY	TYX	TBD	FY4846
127	HOLLOMAN AFB	RUIDOSO, NM	HDX	TBD	FB4801
128	LAUGHLIN AFB	BRACKETVILLE, TX	DFX	TBD	FB3099
129	ROBINS AFB	JEFFERSONVILLE, GA	JGX	TBD	FB2067
130	ALTUS AFB / NORMAN, OK	FREDERICK, OK	FDR	Week of Aug 16th	FB4419
131	COLUMBUS AFB	GREENWOOD SPRINGS, MS	GWX	Week of Aug 16th	FB3022
132	VANCE AFB / NORMAN, OK	CHEROKEE, OK	VNX	Week of Aug 16th	FB3029

NOTE:	All DOD sites' TZ170 equipment will be shipped to the corresponding WFO site.

Attachment F - External Connections

List of WSR-88D Sites with External Organizations Connected To Their BDDS

Sites with the annotation of "*" in the disconnect columns should contact Tim Crum, W/OPS4, 405-573-8888, **before** installing this modification and disconnecting external users. This step will ensure the external user is ready to be disconnected.

Sites with an internal system connected to the BDDS (e.g., a WDSS) can keep the connection.

NWS

Eastern Region

NEXRAD Site Name	City, ST	Physical Port(s) To Disconnect			
		CP2	CP3	CP4	CP5
ALBANY	ALBANY, NY	x*	x		
BINGHAMTON	JOHNSON CITY, NY	x*			
BOSTON	TAUNTON, MA	x*			
BROOKHAVEN	UPTON, NY	x*			
BUFFALO	BUFFALO, NY	x*			
CHARLESTON, SC	CHARLESTON, SC	x			
CHARLESTON, WV	CHARLESTON, WV	x*			
CINCINNATI	WILMINGTON, OH	x*			
CLEVELAND	CLEVELAND, OH	x*			
COLUMBIA	WEST COLUMBIA, SC	x			
MOREHEAD CITY	NEWPORT, NC	x			
NORFOLK	WAKEFIELD, VA	x			
PHILADELPHIA	MOUNT HOLLY, NJ	x*			
PITTSBURGH	CORAOPOLIS, PA	x*			
RALEIGH/DURHAM	RALEIGH, NC	x	x		
ROANOKE	BLACKSBURG, VA	x*			
STATE COLLEGE	STATE COLLEGE, PA	x*			
STERLING	STERLING, VA	x*	x*		
WILMINGTON	WILMINGTON, NC	x			

Southern Region

NEXRAD Site Name	City, ST	Physical Port(s) To Disconnect			
		CP2	CP3	CP4	CP5
ALBUQUERQUE	ALBUQUERQUE, NM	x*			
AMARILLO	AMARILLO, TX			x	
AUSTIN/SAN ANTONIO	NEW BRAUNFELS, TX	x*			
BIRMINGHAM	ALABASTER, AL	x*			
DALLAS/FT WORTH	FORT WORTH, TX	x*	x		
LUBBOCK	LUBBOCK, TX			x	
MELBOURNE	MELBOURNE, FL	x*	x		x
MEMPHIS	MEMPHIS, TN	x*	x*		
MOBILE	MOBILE, AL	x*			

NEXRAD Site Name	City, ST	CP2	CP3	CP4	CP5
		Physical Port(s)			
		To Disconnect			
NASHVILLE	OLD HICKORY, TN	x*			
NORMAN	NORMAN, OK	x	x	x	
NORTHEAST ALABAMA	HUNTSVILLE, AL	x*			
SLIDELL	SLIDELL, LA	x*			
TULSA	TULSA, OK			x	
WESTERN ARKANSAS	TULSA, OK			x	

Central Region

NEXRAD Site Name	City, ST	CP2	CP3	CP4	CP5
		Physical Port(s)			
		To Disconnect			
CHEYENNE	CHEYENNE, WY	x			
CHICAGO	ROMEOVILLE, IL	x*			
DENVER	BOULDER, CO			x	x
DETROIT	WHITE LAKE, MI	x*			
PADUCAH	PADUCAH, KY	x*			
GOODLAND	GOODLAND, KS	x			
INDIANAPOLIS	INDIANAPOLIS, IN	x*			
JACKSON, KY	JACKSON, KY	x*			
LINCOLN	LINCOLN, IL	x*			
LOUISVILLE	LOUISVILLE, KY	x*			
MILWAUKEE	DOUSMAN, WI	x*			
NORTHERN INDIANA	NORTH WEBSTER, IN	x*			
QUAD CITIES	DAVENPORT, IA	x*			
ST LOUIS	WELDON SPRING, MO		x*		
TOPEKA	TOPEKA, KS	x			
WICHITA	WICHITA, KS		x		

Western Region

NEXRAD Site Name	City, ST	CP2	CP3	CP4	CP5
		Physical Port(s)			
		To Disconnect			
CEDAR CITY	SALT LAKE CITY, UT	x*			
SALT LAKE CITY	SALT LAKE CITY, UT	x*			
EUREKA (BUNKER HILL)	EUREKA, CA	x			
FLAGSTAFF	BELLEMONT, AZ	x*			
LAS VEGAS	LAS VEGAS, NV	x*			
PHOENIX	PHOENIX, AZ	x*			
YUMA	PHOENIX, AZ	x*			
RENO	RENO, NV	x			
SAN FRANCISCO	MONTEREY, CA	x			
SEATTLE	SEATTLE, WA	x			
TUCSON	TUCSON, AZ	x*			

DoD

NEXRAD Site Name	City, ST	Physical Port(s) To Disconnect			
		CP2	CP3	CP4	CP5
ALTUS AFB	FREDERICK, OK			x	
COLUMBUS AFB	GREENWOOD SPRINGS		x		
HOLLOMAN AFB	RUIDOSO, NM				
VANCE AFB	CHEROKEE, OK			x	
VANDENBERG AFB	ORCUTT, CA				

> **NOTE:** For Holloman AFB and Vandenberg AFB, no NWSNet connections until RPG Build 6 release.

Attachment G – Sample EMRS Report

A26 Detail Form - ESCM2, SILVER SPRING, MD :: JOHN MERHI - Microsoft Internet Explorer

New A26   Commit A26   Place on Hold   Copy A26   Delete A26   Detail Report   Document Summary   Help

GENERAL INFORMATION

NEW RECORD   WFO* TBW   Document No.* TBW40708007

1. Open Date	Open Time	2. Op Initials	3. Response Priority	4. Close Date	Close Time
07/08/2004	08:00	WSH	○ Immediate ○ Low ○ Routine ● Not Applicable	07/08/2004	10:00

5. Maintenance Description 458 characters left   INFO SYSTEM

Install the SonicWall TZ170 network device

EQUIPMENT INFORMATION

6. Station ID*	7. Equipment Code	8. Serial Number	9. TM	10. AT	11. How Mal
TBW	WAN	001	M	M	999

Alert: Time Remaining:
                                           (For Block 12 use only)

14. WORKLOAD INFORMATION

a. Routine		b. Non-Routine		c. Travel		d. Misc		e. Overtime	
Hours	Minutes	Hours	Minutes	Hours	Minutes	Hours	Minutes	Hours	Minutes
						2	0		

MISCELLANEOUS INFORMATION

15. Maintenance Comments 609 characters left

Serial Number of the SonicWall TZ170 _____
Installed the SonicWall TZ170 network device, I.A.W. NWSNet Modification Note 1

16. Tech Initials
GAF

17. SPECIAL PURPOSE REPORTING INFORMATION

a. Mod No.	b. Mod Act/Deact Date	c. Block C	d. Trouble Ticket No.	e. Block E
1	07/08/2004			

Commit A26   Place on Hold   Copy A26   New A26   Cancel

Internet